

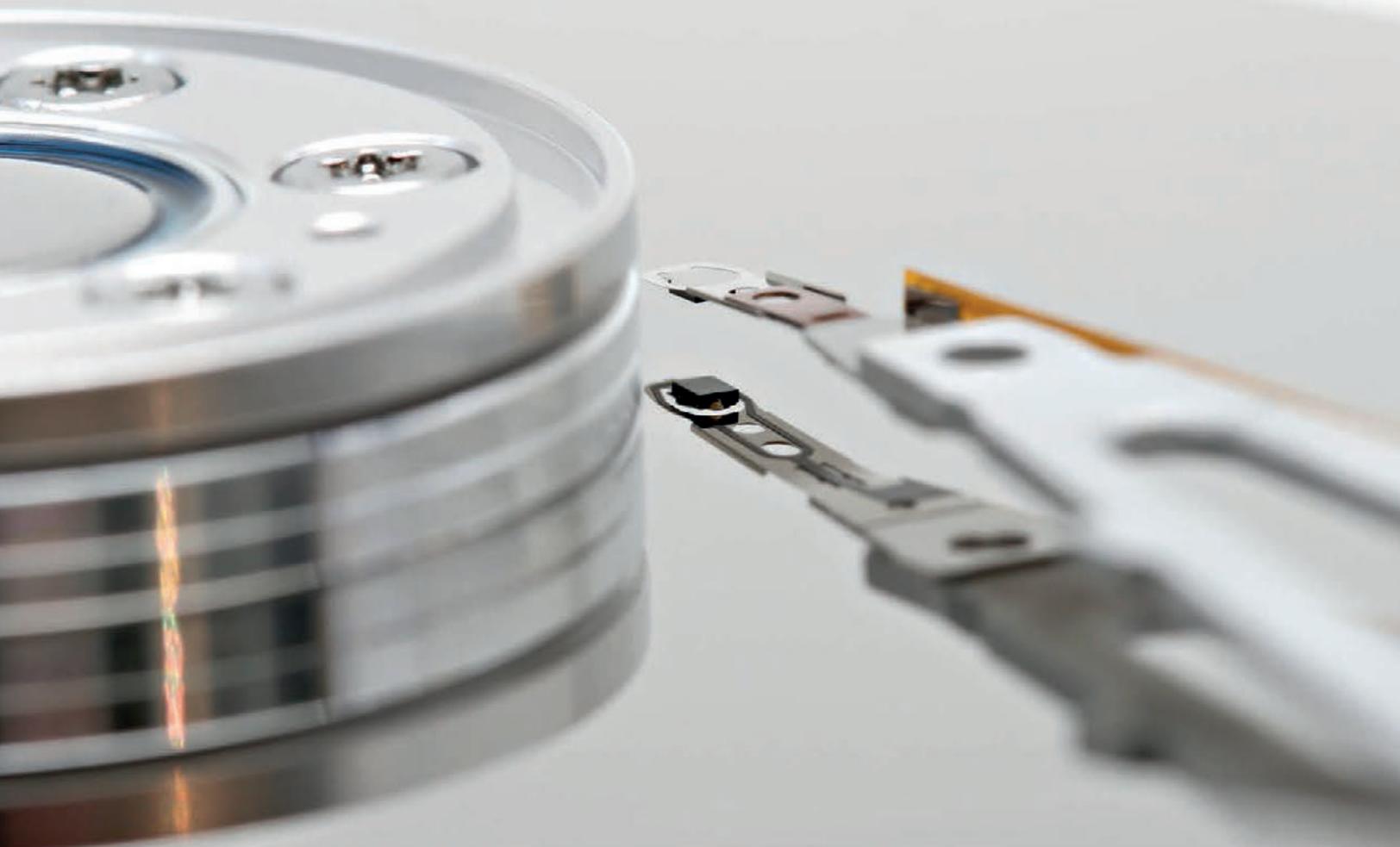
Tradition »

Innovation »

Performance »

Future »

SUPERB { **INSIDE** }



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About the Cover Photo:
Similar to the inside of a hard drive, what is hidden inside is actually what makes the system work. SUPERB {inside} will give you an inside look at the global manufacturing company that has been ranked by Inc. Magazine as one of the fastest growing companies in the United States for three consecutive years.

Inc.
5000
Top 100
Manufacturers
2011 2012 2013

FOREWORD!

At SUPERB we believe that quality, productivity, and customer value are produced from the inside out.

SUPERB {inside} brings you an inside view of SUPERB Industries and how it defied the trend over the past several decades to outsource to low cost countries and become ranked by Inc. Magazine as among the top 100 fastest growing manufacturers in the U.S. for three consecutive years.

Instead of following the trend to outsource, SUPERB invested in the heartland and now manufactures over 130 million engineered components annually and ships over half of them to low cost countries like Mexico and China—that is our story which we want to share with you.

You will learn about our generational tradition of manufacturing quality. You will see a culture that stands in stark contrast to the top down fear and greed model which produces an unproductive and toxic organizational environment.

You will discover where hundreds of engineered components are used which make your world and mine a better place. You will be introduced to SUPERB people who are passionate about manufacturing and learning new skills.

We will share success stories about our friends and customers and introduce you to our international partners who have enabled SUPERB to compete globally.

More importantly, we trust that SUPERB {inside} will spark an idea or two on how SUPERB could add value and savings to your supply chain or help you make your organization a better place.

With SUPERB regards,
John Miller
President
Chairman of the Board



I understand that our customers are faced with tremendous pressures to compete in a global economy. They must offer globally competitive pricing on high quality products. We are here to help them achieve that. We accept that challenge.

We are committed to value—unbeatable value. The SUPERB value consists of price, quality, and customer service. We know price is what most people are focused on today. We are able to deliver the best value and a low price by equipping our SUPERB team members with cutting-edge manufacturing technology.

For example, our Bihler automated assembly systems allow us to merge multiple manufacturing processes into one automated process, which reduces labor and material costs. In a recent instance, this combination allowed us to give our customers a 25% cost savings and improved quality. This is the SUPERB unbeatable value.

We are constantly looking for and investing in new technology that helps us reduce costs and improve quality. However, we know that all the technology in the world does not do any good without trained technicians. To be able to deliver SUPERB value in the future, we are dedicated to training SUPERB technicians, which is why SUPERB Technical Institute is vital to our success. The way we deliver the best value and low price is with a SUPERB team and cutting-edge technology—today, tomorrow, and in the future.

SUPERB {inside} gives you an inside look at all these things and more. Enjoy!

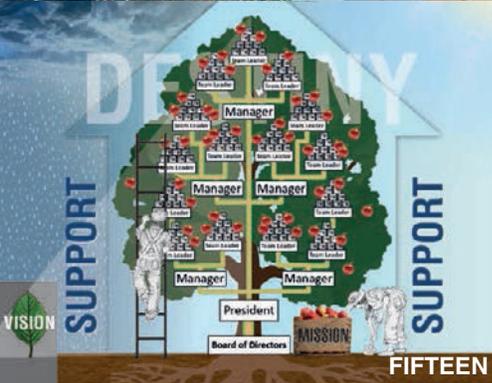
Sincerely,
Daniel Miller
Vice President of Operations



SIX



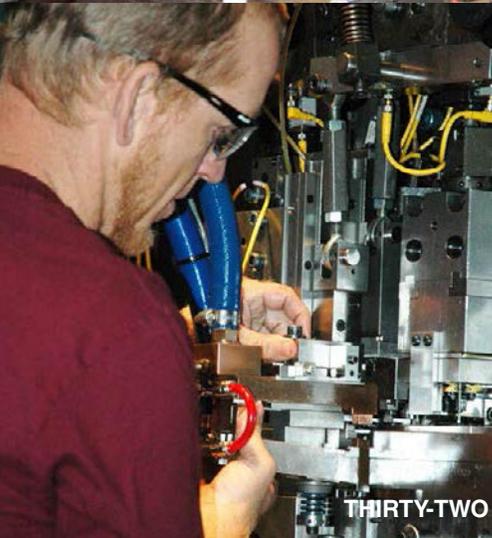
EIGHT



FIFTEEN



TWENTY-FIVE



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FIFTY-FOUR

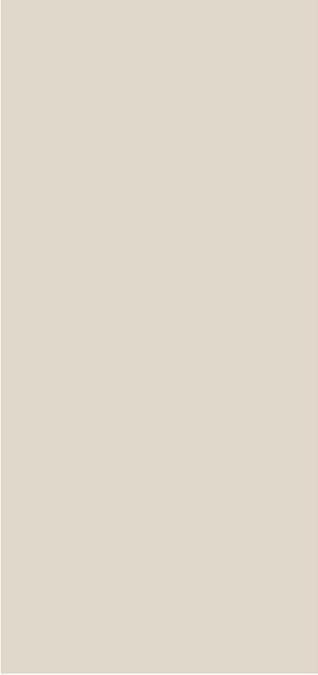


FIFTY-NINE



SIXTY-FOUR

Dating back to the late 1700s, Miller family craftsmen, beginning with Christian "Schmidt" Miller, have been making the world a better place. At SUPERB Industries this remains the mission for every engineered component manufactured.



TRADITION



VISION

WHERE GENESIS MEETS DESTINY

It began in 1986 with authentic vision.

In the beginning, Dan and John Miller had only a two car garage deep in Ohio's Amish country and a vision to make a difference in the manufacturing arena: "It became apparent to me that the manufacturing world needed manufacturers with a commitment to the superb quality craftsmanship that was a natural part of my Swiss German heritage," recalls John Miller.

"My genuine desire to fill this need caused us, against all odds, to plant the seed of what would become

SUPERB Industries and to call it by that name.

"So compelling was the notion that the world needed a truly superb manufacturer who would solve real problems better, who would deliver goods on time, who would do so at an equitable price and find a way to treat its employees well, that the fact we lacked nearly every tangible resource from money to machinery to build it never deterred us.

"It was at that specific moment in time when these two elements—

need and desire—converged to germinate the ideal future that authentic vision was created. More importantly, genesis had met destiny, even though this ideal future actually did not yet exist. But it was so real that achieving it became believable and doable.

"Being superb was the watchword, even when it meant being superb with what little we had, where we were at the time—in a two car garage with a decrepit grinder, a used milling machine, a welder and no money. Superb? It was an audacious overstatement, but it mattered not, because the underlying attitude and intent was authentic. I could see the future of SUPERB Industries as surely as you can see the structure of the tree on the first leaf which unfolds on a newly spouted plant."

The authenticity of this vision has been confirmed milestone by milestone as SUPERB outgrew the two car garage and moved to a larger building; as it moved to Sugarcreek to build a manufacturing campus; as it opened Innovation Plaza to the public to celebrate a rich heritage past, and to project the validity of its vision into the future.



A two car garage, a decrepit grinder, a used milling machine, a welder and no money embodied the tangible assets of SUPERB.



Benedict-Emanuel Miller—whom founder John Miller remembers as a youth—continued in the tradition of his great-great-grandfather “Schmidt” by plying the blacksmithing trade in the village of Sugarcreek until he was in his eighties.



Daniel Miller displayed a strong commitment to superior craftsmanship that continues to be appreciated by the contemporary generation.

The authenticity of this vision is perhaps best understood by the rich heritage on display on Innovation Plaza. It predates the founding of SUPERB by seven generations with the first documented evidence of its genesis in the life and work of Christian “Schmidt” Miller. “Schmidt” apprenticed as a blacksmith and made the colonial frontier a better place by forging wrought iron wares for pioneers and natives alike.

Schmidt’s son Jonathan moved to the Sugarcreek area in the early 1820s and built a water powered sawmill on Doughty Creek to cut timber into lumber for the betterment of life on the Ohio frontier. Three generations later, Benedict-Emanuel

Miller—whom founder John Miller remembers as a youth—continued in the tradition of his great-great-grandfather “Schmidt” by plying the blacksmithing trade in the village of Sugarcreek until he was in his eighties.

His son Daniel, an artisan farmer, carpenter, and avid clockmaker with a penchant for detail, impressed the enduring value of excellence upon the next generation—anything less would be a breach of principle. His commitment to superior craftsmanship remains appreciated by the contemporary generation—the heirloom grandfather clocks he handcrafted continue to chime on the hour, every hour.

Daniel’s son Jonathan (J.D.) carried clock making to the next level by mass producing clock springs and wire forms. Through the years, J.D.’s business grew into a manufacturing enterprise that supplied national brands, like the Hoover Company, with precision metal formed components. Widely known in the area for his passion for steam-powered engines, J.D. spent ten years restoring a vintage 1912 Case Steam Engine to mint condition. J.D. is the father of the SUPERB founders.



Taking the Vision Global

The steel silhouette memorials on Innovation Plaza celebrate ten generations of superb Miller craftsmanship. Moreover, they feature three contemporary generations who are committed to carrying this heritage into the future. This generational heritage, spanning ten generations, provides a fitting pathway to the contemporary SUPERB entrance with a superimposed globe and a custom designed glass wall that is also the work of local artisans. Symbolizing SUPERB's global impact on the manufacturing arena, the SUPERB manufacturing campus is a testimony to the importance of authentic vision.



The steel silhouette memorials on Innovation Plaza celebrate ten generations of superb Miller craftsmanship.

A SUPERB Vision Remains



John Miller, President

“To Be
SUPERB—to
live up to our
Name...with
SUPERB People,
Performance,
Product, Price
and Profit.”

The Proverb states, “Where there is no vision, the people perish.” At SUPERB, this tried and tested Proverb remains a vital part of SUPERB’s organizational culture. The SUPERB Vision is an integral part of an ideal organizational ecosystem in which superb people engender superb performance to produce a superb product at a superb price and reasonable profit. This vision connects back to the very genesis of SUPERB, when “being superb” was merely an idea in the mind of its founders, and reaches forward into infinity as the guiding inspiration for the organization.

VALUES

SUSTAINING ORGANIZATIONAL VITALITY

Values are indispensable for organizational vitality. Without them our organizational vision “to be SUPERB—to live up to our name” would have been dead on arrival. SUPERB values are not pithy platitudes filling obligatory space in organizational or marketing documents to make a good impression on customers—they are the very sustenance that makes organizational strength, growth, and vitality possible.

With these values our organizational ecosystem is healthy, vibrant, productive and destined for success. Without them organizational death would be predestined in the next economic storm, or at the hand of a hostile organizational poacher.

Given the indispensable nature of these values, we have intrinsically connected them with our name, so they are always deployed throughout our collective organizational mind:

Superior Craftsmanship
Unbeatable Value
Performance On-Time
Equity, Environment, Empowerment
Refinement
BottomUp Organizational Ecosystem

The six SUPERB Value statements are inseparably connected with “what we do” and “who we are” because they provide the sustenance for both.

The first three statements—Superior Craftsmanship, Unbeatable Value and Performance On-Time define “what we do” or perhaps more precisely—“how we do it.”

The next three statements—Equity, Refinement and BottomUp Organizational Ecosystem define “who we are” or more broadly “who we endeavor to become.”

Perhaps more importantly, these value statements provide an applied ethical basis that becomes the moral foundation which defines “right, fair, and good” that give cognitive

assistance to guide individual and organizational decision making. “I believe the SUPERB values provide the moral basis for ethical decisions that will result in stability in the workplace,” states John Miller. “Good old fashioned values still have value because when people commit to them, consistency, reliability and dependability result. This enables them to produce goods and services of value which ensures a sustainable customer base because they keep coming back for more.”

The axiom “we are the product of what we consume” is relevant in this connection. As SUPERB uses these values by consistently embracing them as an organizational culture, the production of product consistent with these values is ensured. It ensures an organizational environment in which people, systems, and machines ally to make the world a better place through the consistent production of superior quality products and services at equitable prices.

Superior Craftsmanship

Unbeatable Value

Performance On-Time

Equity, Environment, Empowerment

Refinement

BottomUp Organizational Ecosystem

SUPERB

MISSION

MAKING THE WORLD A BETTER PLACE

Vision and Values converge to ensure purposeful output extending beyond self interest to include all stakeholders in the organizational ecosystem. This purposeful output commonly called organizational mission begins inside SUPERB but must extend outside to be meaningful to us and beneficial to those whom we serve.

The SUPERB Mission is to make the World a Better Place...



By consistently producing products and services of superior quality at equitable prices;

By providing above average wages and benefits to qualified employees in the community;

By maintaining a reasonable return on investment for the stockholder.

...One Engineered Component at a Time.

This three point mission, committed first to making the world a better place, considers the interests of all stakeholders in sequential order of importance beginning with you, the customer. Consistently producing products and services of superior quality at equitable prices is sustained and made possible by our organizational values of superior craftsmanship, unbeatable value, and performance on-time which defines “how we do things.”

Delivering consistently on the first point of our mission makes possible the second; to provide

above average wages and benefits to qualified employees. Providing above average compensation to our employees is part of “who we are” guided by the moral foundation expressed in our values committed to equity, environment, and empowerment which in turn makes the production of quality products on a sustainable basis possible.

Finally, consistent delivery on the first two points of our mission, makes a reasonable return on investment for the stockholder both equitable and possible. This unconventional approach

to shareholder returns draws its inspiration from our BottomUp Organizational Ecosystem focused on long term organizational vitality which results in higher returns over time. This stands in stark contrast to toxic top down organizations’ obsession with short term results at the expense of long term viability.

SUPERB is on a mission to make the world a better place for the benefit of all—not at the expense of some—stakeholders. We believe this is our moral and ethical duty to the entire organizational ecosystem all the way from the bottom up.

CULTURE

A BOTTOMUP ORGANIZATIONAL ECOSYSTEM

Corporate culture must be built from the bottom up and from the inside out, or it will not be authentic or sustainable. SUPERB Industries adopted the BottomUp Organizational Ecosystem to build and sustain a culture conducive to growth and vitality.

This business management model was developed by John Miller in the mid-1990s and has served SUPERB throughout the years supporting its extensive growth by fostering an Ego-Less Workplace. The BottomUp Organizational Ecosystem demonstrates the true structure of leadership—it supports from the bottom up instead of dictating from the top down.

What is the BottomUp Organizational Ecosystem?

The BottomUp Organizational Ecosystem is a radical departure from the greed and intrigue of the stereotypical top down corporate structure. It represents a commitment to a balanced and sustainable business model that draws its inspiration from the laws and systems of nature. It is an environmentally responsible organizational ecosystem comprised of what we call the economic climate, the composition of the soil, and the organizational tree, which combine

to form an environment of growth and vitality.

This environment is maintained by shareholders committed to a process called organizational husbandry which displaces the desire “to take” with a commitment “to make.” This commitment “to make” ensures a healthy organizational environment and greater shareholder value in the long term.

Why a Tree?

The primary component of The BottomUp Organizational Ecosystem is the Organization Tree. It draws on the perpetual wisdom of this natural structure that is designed to survive the stress of storms and other hostile environmental factors. And it grows from the bottom up!

What is so obvious in nature has long been ignored by organizational architects. The commonly used top down organizational tree depicted by organizational charts is fundamentally flawed, because it goes against the laws of nature.

Trees do not grow from the top down and neither should organizations. A healthy organization—like a tree—grows from the bottom up, firmly rooted in value rich soil supported by a trunk and branches. Then, and

only then, can effective growth and production be sustained.

SUPERB's vision, mission, and values form an integral part of our BottomUp Organizational Ecosystem. SUPERB's values provide the roots with nourishment, giving the organizational tree the strength and vitality it needs to thrive. The board of directors and president provide strength, balance and support to the branches and twigs so that they can be productive and effectively fulfill our mission.

Do Twigs Matter?

Production workers, like twigs on a tree, are often seen as dispensable. Nothing could be further from the truth. Nature teaches us that twigs and production workers are indispensable because they represent the only part of the organizational tree that is productive. Twigs, not trunks or branches, bear fruit. Twigs are where new growth occurs. Twigs are flexible and have the ability to respond to the changes in economic demand. In short, not only do twigs matter, without them the organizational tree is dead.

SUPERB provides support and empowers its production team with a high level of responsibility because without them productivity stops.

The Leaf: A Visionary Genetic Blueprint

When need and desire converge and germinate a vision of an ideal future, it emerges as a leaf which provides a genetic blueprint of what this future will look like. On the leaf, the design of the branches, limbs, and twigs of the tree can be seen even though the tree does not yet exist.

Authentic vision has the same function within the BottomUp Organizational Ecosystem—it continually shows what the future will be like even before it actually exists and is firmly attached to every twig. For vision to be effective, it must be spread throughout the entire organization like leaves on a tree. This stands in stark contrast to the tired visions that are merely platitudes in organizational documents that no one really believes.

At SUPERB, vision is deployed in a very practical manner—on, and in, every production job order. Like leaves on a tree, it is a living document that not only displays the ideal future; it also communicates the specific requirements of current economic demand directly from the customer to the individuals who make it happen—the twigs.

The Natural State: An Ego-Less Workplace

The BottomUp Organizational Ecosystem produces what should be the natural organizational state—an Ego-Less Workplace where individual and organizational innovation can flourish. When managers support team leaders like branches on a tree; when team leaders provide nourishment to their members like limbs provide sustenance and support to twigs; when dead and unproductive branches and suckers are removed, then the organization is transformed from an Ego-System which is toxic and unproductive to an Eco-System brimming with productivity, health, and vitality.

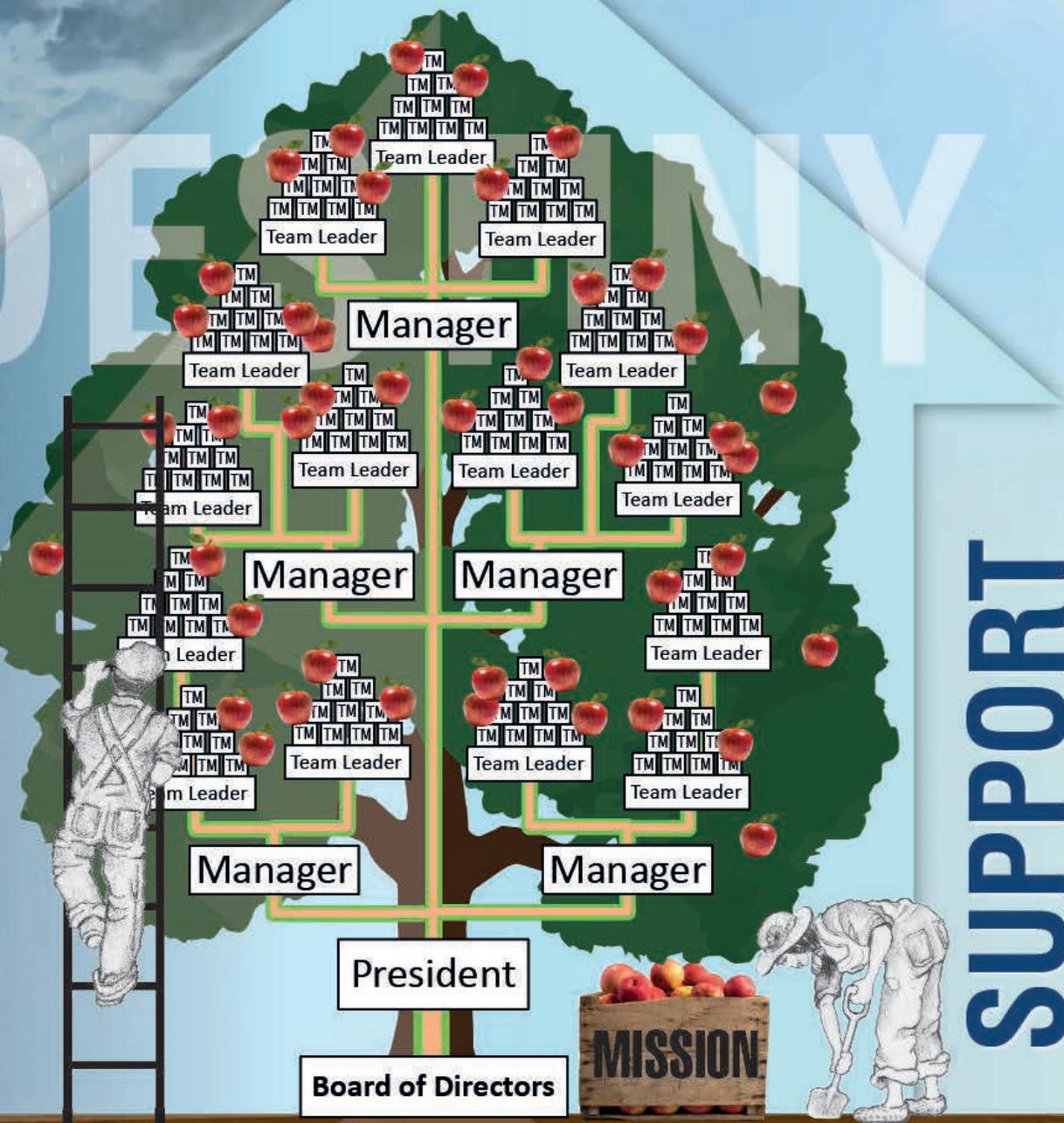
Organizational Ego-Systems which may seem normal are, in fact, toxic and lead to death. An organizational Eco-System which produces an Ego-Less Workplace may seem abnormal, but it is the natural way to a sustainable and productive future.

SUPERB Industries is committed to maintaining and sustaining that future all the way from the bottom up.



THE BottomUp[®]

ORGANIZATIONAL ECOSYSTEM

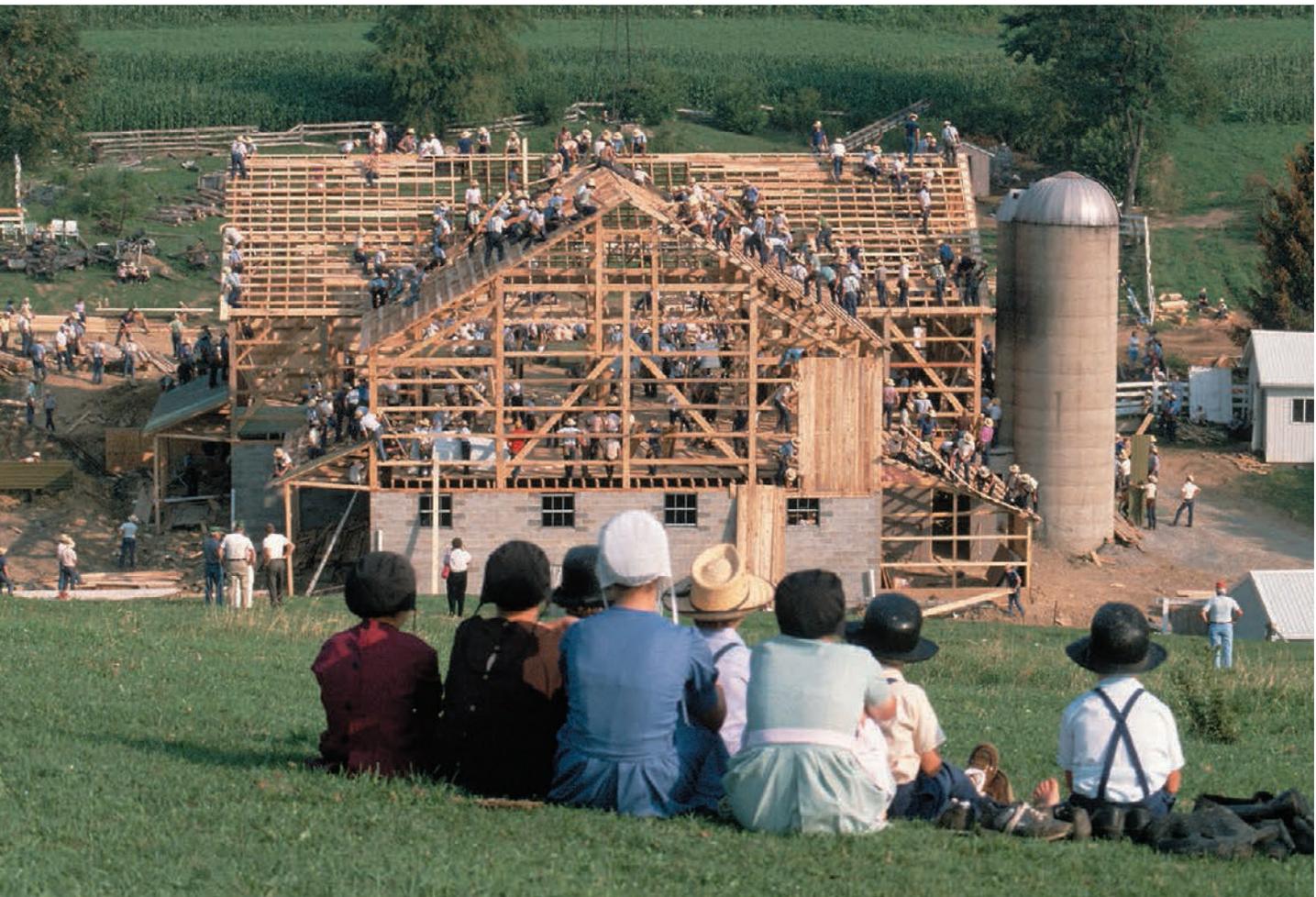


SUPPORT

VALUES

COMMUNITY

A HERITAGE OF GENERATIONAL CRAFTSMANSHIP



It may seem unusual to find one of the fastest growing manufacturers in the U.S. to be located in a village that is part of the world's largest Amish community. However, that is exactly why SUPERB Industries continues to compete in the global market and manufactures over 130 million components annually.

A SUPERB Location

Located in Sugarcreek, also known as The Little Switzerland of Ohio, SUPERB is a product of the area's old world charm and craftsmanship that has been alive for generations. By passing on the rich heritage of previous generations, SUPERB

blends a unique combination of age-old skillsets with modern day innovations creating one of the top 100 fastest growing manufacturers in the U.S., according to Inc. Magazine.

Any visit to SUPERB is not complete without understanding

the community and its influence. Sugarcreek is nestled in the picturesque rolling hills of Ohio's heartland. Founded in the early 1800s with the arrival of Swiss and German immigrants, these hearty families brought their cheesemaking, farming, and craftsmanship skills from the old country to Sugarcreek. The hard work ethic, superior craftsmanship, and old world ways of doing things remain a standard in everyday life. It is common to see large groups of Amish men working together to build a barn, while the women folk gather to quilt; families working long hours in the cheesehouse making world famous Swiss cheese or

gathering the harvest in the fields, the young and old work together demonstrating their penchant for teamwork.

Bridging the Past to Today

The camaraderie and teamwork seen in the community is alive inside SUPERB. With team members working with apprentices and discussing how to refine procedures to increase productivity, SUPERB focuses on passing down the time-tested skillsets of yesteryear while using today's most innovative processes, which results in manufacturing superior crafted components. From Innovation Plaza to the tool room, the importance of the area's heritage to today's ways of doing business shines brightly.

Keeping Time

SUPERB is also an active member of the community, contributing in various ways and for numerous projects. One such community project helps keep time in the village. Sugarcreek is home to the "World's Largest Cuckoo Clock" that towers over 23 feet tall and 24 feet wide on the village square. Every-half-hour, the cuckoo bird pops out and polka music plays as the band emerges and a couple dances. SUPERB Industries is proud to assist the village by providing engineering and maintenance services to keep the clock ticking and music playing.

While you may share the roadway with a horse and buggy traveling down Main Street during your visit to SUPERB, Sugarcreek is more than just a tranquil village tucked away in Ohio's Amish country. It is home to SUPERB Industries, a global manufacturing campus that combines the superior craftsmanship used for generations with today's most innovative processes.

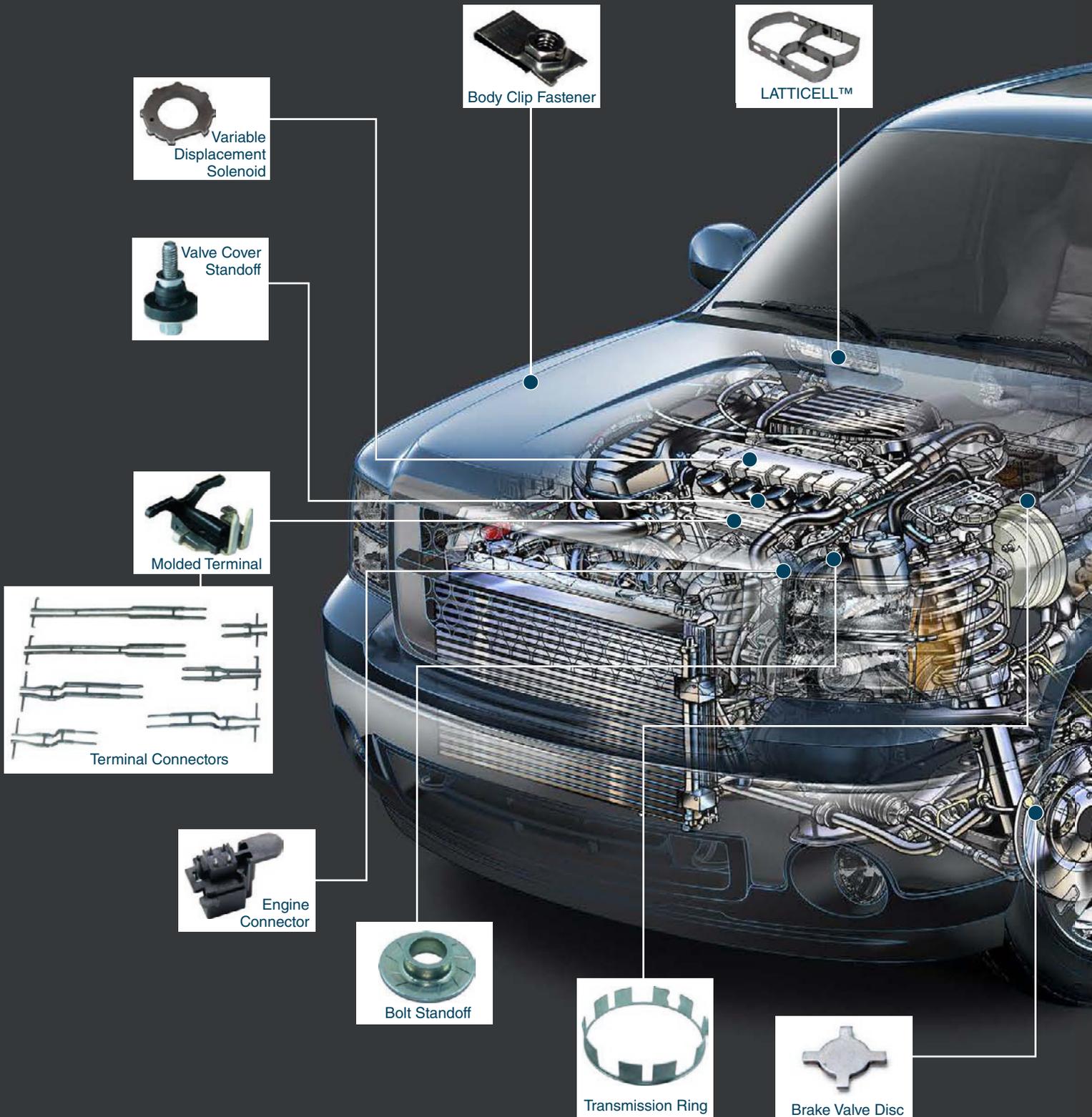
So as we say, "Willkommen!"
Welcome to SUPERB!



Sugarcreek is home to the "World's Largest Cuckoo Clock" that towers over 23 feet tall and 24 feet wide on the village square.

MAKING THE WORLD

A BETTER PLACE...



Variable Displacement Solenoid



Valve Cover Standoff



Molded Terminal



Terminal Connectors



Engine Connector



Bolt Standoff



Body Clip Fastener



LATTICELL™



Transmission Ring



Brake Valve Disc

...ONE ENGINEERED



LATTICELL™



Bearing Cage



LATTICELL™



Drive Train Bearing Cover



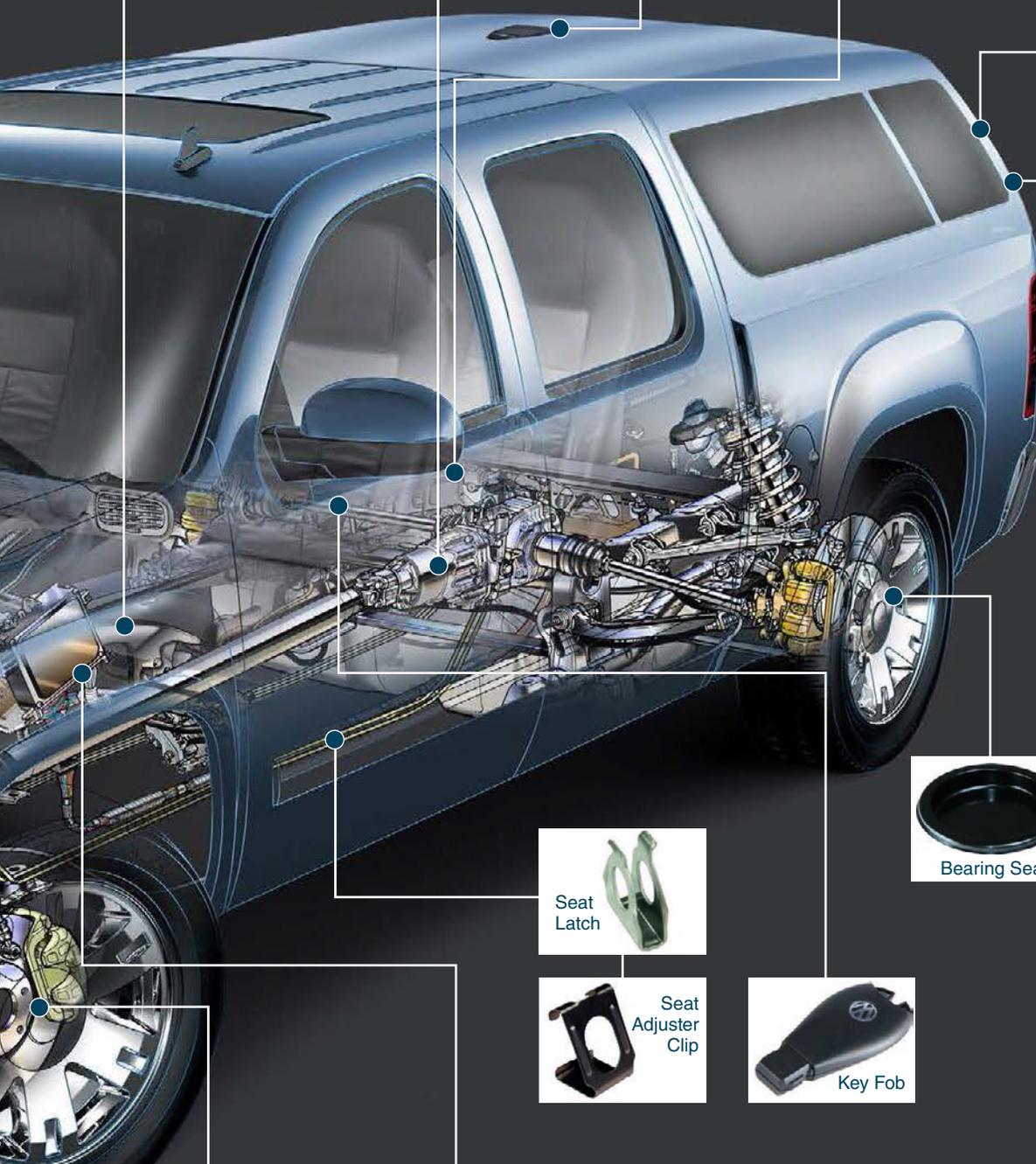
Sol-A-Ray



Window Connector



Palm Handle E-Lock Set



Rail Cover



Cap Fascia



Cap Nut



Rubber Headed Bolt



Wear Plate



Bearing Seal



Seat Latch



Adjuster Bracket



Seat Adjuster Clip



Key Fob



Top Clamp



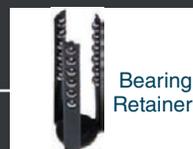
Wheel Bearing Shield



Steering Column Bearing Race



Steering Alignment Sleeve



Bearing Retainer



Spacer Clamp Space

COMPONENT AT A TIME



Dog Collar Contact



Dog Collar Contact



Dog Collar Contact



Dust Cover



Bridging Clip



Phone Terminal



Telecom Contact



Transformer Clip



Motor Cover



Washer Timer



Motor Housing



Electric Pole Insulated Cover



Drawn Cup



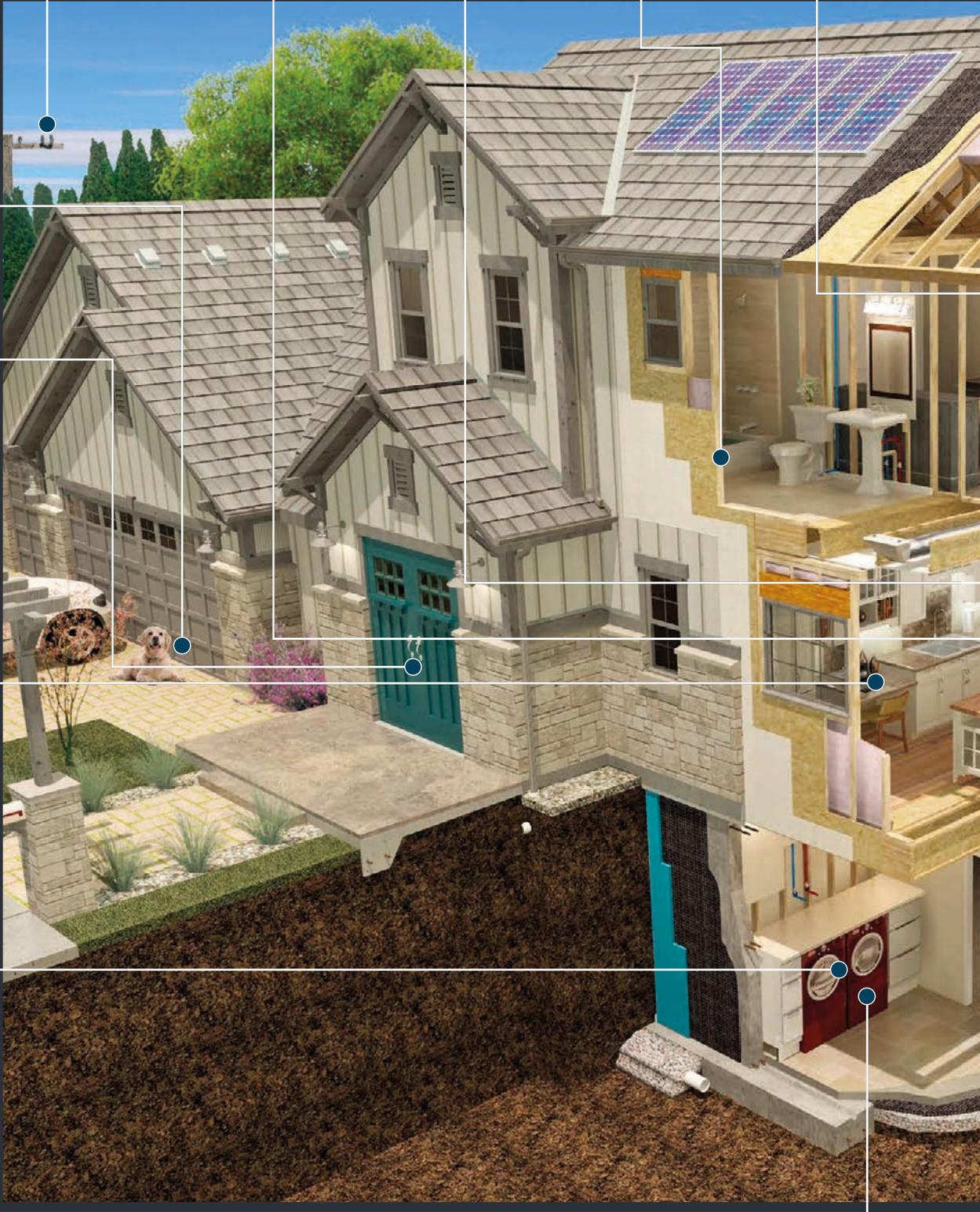
Heat Sink



Stud Guard



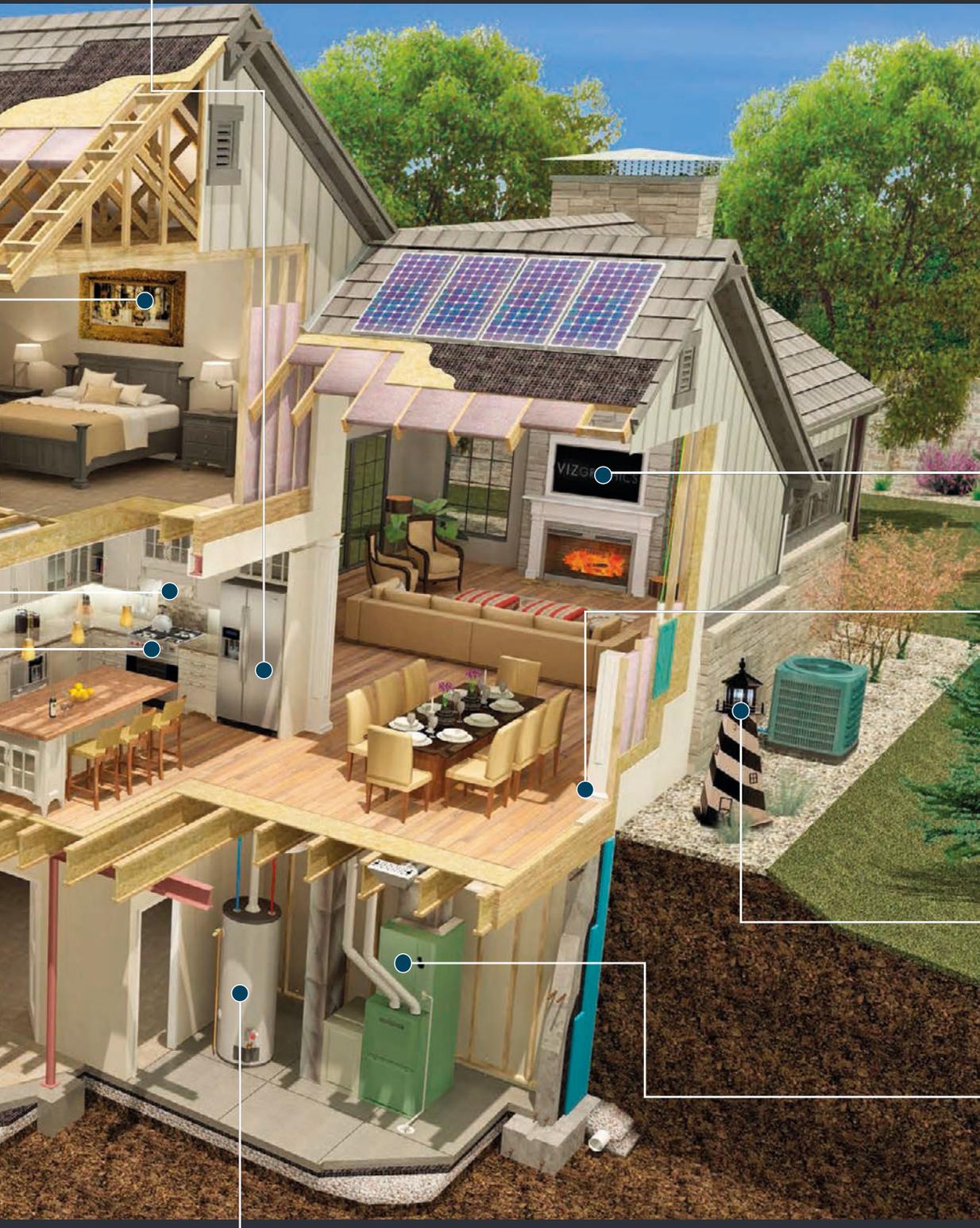
Wall Bracket



...ONE ENGINEERED

MAKING THE WORLD

A BETTER PLACE...



COMPONENT AT A TIME

ENGINEERING

VALUE FOR THE CUSTOMER

Some engineers design processes.
Others design products.

SUPERB engineers take a different approach.
They engineer value!

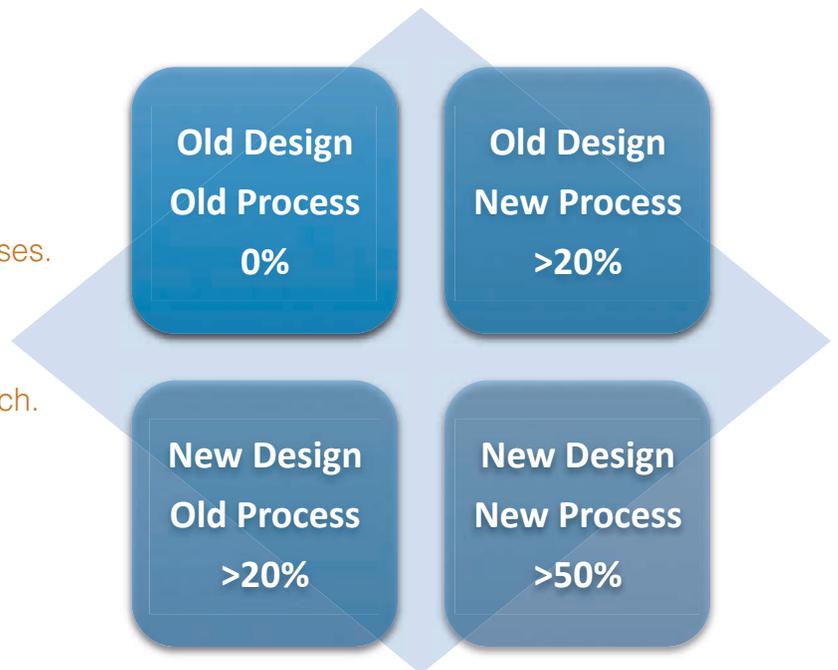
As the Engineering Value Quadrant shows, SUPERB engineers view product and process in the context of the value, which can be engineered for the customer.

The Value Proposition Process

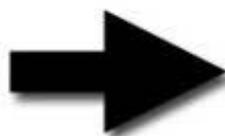
The best value proposition comes when both the product design and process design are optimized to deliver value to the customer.

The SUPERB engineering team works alongside our customers to optimize product design to meet all performance criteria while assuring compatibility with efficient manufacturing processes. By using this collaborative process, value is

engineered into the product DNA to ensure global competitiveness. This process often reduces total product cost by over 50 percent.



Engineering Value Quadrant



They met, talked, understood, brainstormed and then the customer sketched ideas on a napkin.



Analyzing the Finite to Explore Infinite Possibilities

During the engineering process when concepts move from sketches on napkins to 3-D Models, SUPERB supports its customers with the latest technology to ensure all value possibilities are explored. We can provide material selection support, computer modeling, Finite Element Analysis (FEA), and design for manufacturability analysis.

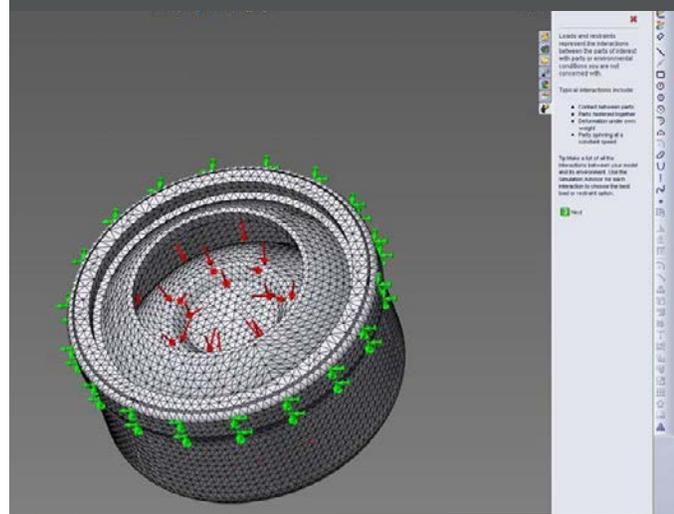
Once the concept moves to an engineering design, Stereo lithography (SLA) models, 3-D printed samples, and production representative prototypes are all part of the SUPERB value engineering process and support. This is a collaborative process that can occur at the customer's site, SUPERB's engineering Think Tank, or through a combination of online collaboration and video conferencing to speed the process and save on travel costs.

Concurrently, SUPERB engineers consider and design the most efficient process for product. This discipline is supported with Advance Product Quality Planning (APQP) methodology along with detailed process mapping, which establishes the most efficient process. Workflows are computer modeled and process analysis software, such as Mold Flow Analysis is used to define the most effective process parameters.

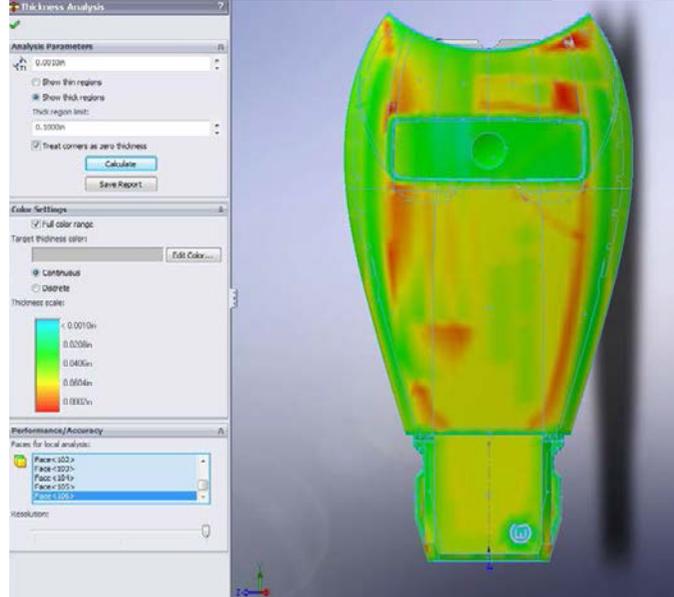
Reinventing the Old to Create New Value

Often legacy manufacturing processes and entrenched product designs preclude the use of the optimal value proposition—new design, new process. However, these situations do not prevent SUPERB from engineering value for the customer. Value can be engineered by optimizing an old design with a new manufacturing process, or conversely, a new product design with an old manufacturing process. Case studies of the former—new manufacturing process—include the reduction of material use by more than 20% to deliver value to the customer. Examples of the latter include product design enhancements, which enable even an old manufacturing process to deliver more value. SUPERB's focus on Engineering for Value delivers the expected engineering output—product and process design—with an important enhancement: Globally Competitive Product and Process Value.

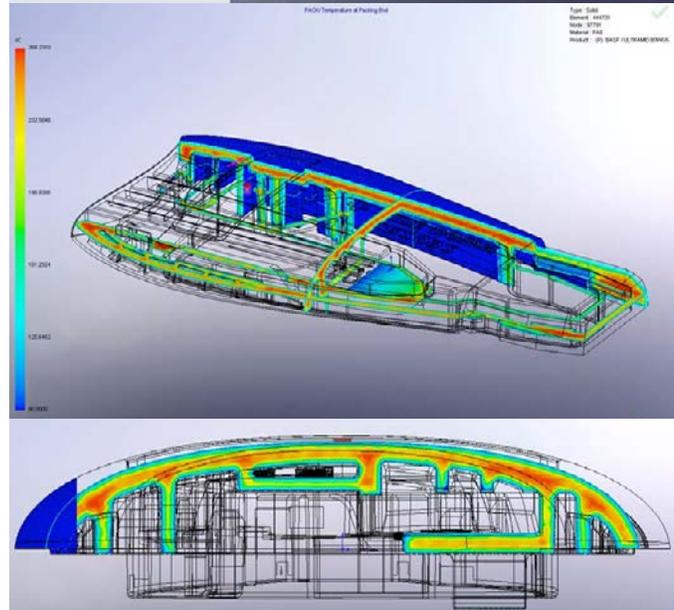
Finite Element Analysis



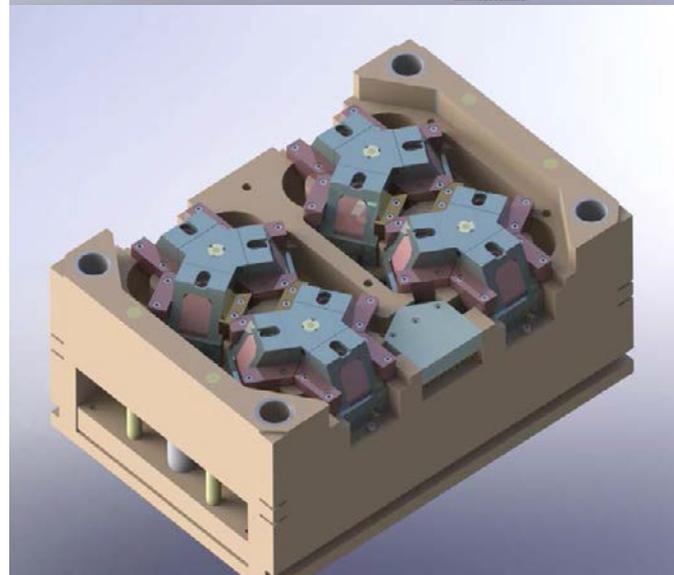
Wall Thickness Analysis



Mold Flow Analysis



Complex Molds and Tooling are designed with 3-D CAD Software.



TOOLING

VALUE FOR THE LONG
TERM

SUPERB tooling is built to last and outlast other manufacturers' tooling.



Toolmakers work to find the best way to enhance current tools and make new tools while satisfying the customer's needs.

The quality of the part cannot exceed the quality of the tool; therefore, the SUPERB tool room is the backbone that supports production operations with new tooling and predictive and preventive tool maintenance. The multifaceted tool room is staffed with journeymen who service dies, build new tools, spare parts, and prototypes.

Skilled journeymen toolmakers with years of industry experience and young apprentices that work under their direction build and maintain the SUPERB tooling. While other companies may have separate departments for each of these operations, SUPERB's tool room is dedicated to building value in each tool.



Skilled grinders can hold tolerance to twenty millionth of an inch using grinding machines in a climate controlled environment.



The multifaceted tool room is staffed with journeymen who service dies, build new tools, spare parts, and prototypes.

Tolerance to the Millionth

SUPERB's high speed, tight tolerance production operations require exacting tool making skills. Hence, SUPERB must work to precise tolerances and use high quality and, in some cases, exotic materials to maintain the standards required by its customers. Skilled grinders can

hold tolerance to twenty millionth of an inch using grinding machines in a climate controlled environment. SUPERB's tooling longevity is ensured by using tungsten and titanium carbide material in addition to alloyed tool steels.

Customer Service Commitment

Toolmakers are not just interested in meeting the customers' needs and requirements, they strive to exceed them.

With a goal to establish a long-term customer relationship, SUPERB toolmakers work closely with customers. This type of interaction focusing on the customers is critical because it allows the toolmakers to assist customers one-on-one with new projects or how to save money on existing projects. Toolmakers work to find the best way to enhance current tools and make new tools while satisfying the customer's needs. This is just one way SUPERB tooling is superior to other tooling.



Die components are engineered for full interchangeability and manufactured to exacting tolerances.

HIGH SPEED

STAMPING

LEVERAGING *TIME & SPACE*

From Cups to Coined Contacts, SUPERB High Speed Stamping leverages time and space to deliver value to our customers.



Many think we are limited by *time* and *space*. SUPERB stamping focuses on leveraging these two cosmic elements to deliver value to customers on earth. It is true that the manufacture of stamped components is constrained by *time* and *space*. However, we can leverage both by minimizing the amount of *time* and *space* the fabrication process occupies.

High-Speed, Near-Net-Shape

Enter high-speed, near-net-shape: The cost of a stamped metal component is composed of two elements—the speed of the manufacturing process and the amount of material used. SUPERB has invested heavily in two technologies to leverage *time*—the world renowned Bruderer high speed stamping presses and carbide progressive dies.

These technologies are well known in

their application for the manufacture of connectors, terminals, and reel to reel stampings, which we provide for our customers. However, SUPERB has taken these technologies to the next level to further leverage *time* by defying friction in the production of cup shaped drawn metal parts.

Leveraging *time* is not enough to stay competitive globally. We must also leverage *space* with a near-net-shape process. So much valuable *space* that could be leveraged is often squandered on a process design that wastes valuable raw material. Near-net-shape minimizes waste to maximize value.

Case Study

SUPERB has applied the cosmic principles of leveraging *time* and *space* to hundreds of products, but one case study should suffice to illustrate its benefits. A customer transferred an old process and a

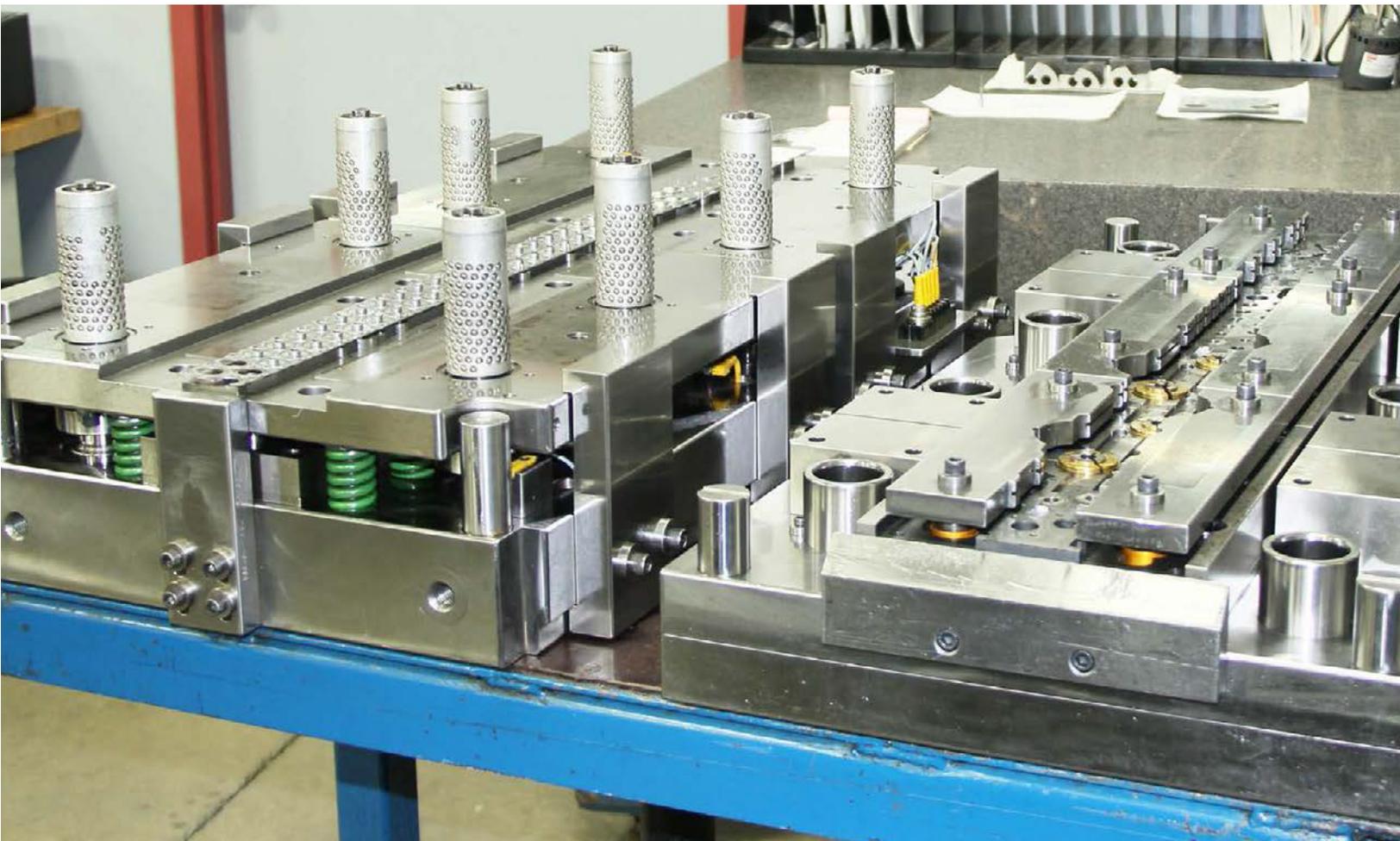
mature commodity product (a drawn cup) to SUPERB for enhancement. Process output took a lot of *time*. And, material consumption occupied a lot of *space*. The old process output was 100 pieces per minute and material consumption wasted a lot of *space*.

First, SUPERB optimized the old process to leverage *time* to increase output to 200 parts per minute. Second, SUPERB designed a new process to leverage both *time* and *space*. The result: Output increased to 600 drawn cups per minute with a 30% savings on material.

Down to Earth Benefits

When you bring your stamping problems to the people at SUPERB who understand how to leverage instead of being limited by *time* and *space*, you will realize some very down to earth benefits—cost savings!

Carbide Progressive Dies ensure precision and reduce friction to enable process speeds that are otherwise unachievable.



MOLDING

INJECTING VALUE INTO PRODUCT

SUPERB's Injection Molding department produces millions of precision plastic parts using engineered polymer resins.

Molding Millions

Some injection molding departments are satisfied mass producing plastic garbage cans. SUPERB is not this kind of injection molding department. In fact, everything that rolls off the molding department production line is an engineered plastic part with an exact tolerance to engineering specifications.

Millions of key fobs are manufactured in the molding department. From Chrysler and Volkswagen key fobs to over molded electrical connectors, SUPERB is the place

automotive companies look to for a high quality plastic injected molded parts. In addition to key fobs, molding technicians produce intricate engineered plastic parts for truck caps. By using modern robotic machines, finished parts are scratch and blemish free, providing the customer with pristine engineered resin parts.

Primed for High Quality

Equipped with a computerized material drying and delivery system, engineered quality resin is prepared for more than four hours before it enters the modern robotic machines. With the capability to run a consistent quality product 24 hours a day, the robotic unload

systems ensure that parts do not suffer aesthetic damage during the ejection process.

Adhering to the strict standards of the automotive industry, SUPERB's injection molding department produces millions of key fobs and automotive components to exact customer specifications.

Guaranteeing Value

With the large amount of parts that come off the molding line, it may seem impossible to ensure each item is a high quality part. But SUPERB's molding technicians and production support members have been trained in TS16949 certified quality systems to ensure process and product quality.

From working with the sales and marketing departments to making certain the customer receives exactly what is required to conducting internal inspections to following procedures, the injection molding department maintains SUPERB's high standards while injecting value into each part it makes.

Millions of key fobs
are manufactured
in the molding
department.



Using modern robotic machines, technicians can program the machine to finish parts that are scratch and blemish free, providing the customer with pristine parts.

BIHLER

AUTOMATED SAVINGS



A Bihler technician programs process parameters on one of the Bihler machines at SUPERB.

Bihler
manufacturing
technology is
stamping on
steroids.

German Technology

SUPERB has a long tradition of utilizing Bihler technology, resulting in cost savings for customers, efficient production and value added to every manufactured component. Bihler machines are highly automated flexible manufacturing systems which can stamp, form, tap, assemble, and weld in one integrated process to produce a product from the very start to the finish.

Efficient Focused Production

SUPERB engineers review product and process requirements and then design a Bihler process solution which will yield the most cost effective manufacturing process. The ability to process a strip of material or individual components through a series of asynchronous steps in one integrated process ensures maximized efficiency and product repeatability. These process steps may include progressive



stamping and bending of metal, followed by operations which would normally occur in a separate process— tapping threads, welding components, inserting plastic parts, and other assembly operations.

Bihler enables all of these steps to be performed in one process from raw material to finished sub-assembly at higher speeds than conventional automation because the process flow has not been interrupted. This significantly reduces the machinery footprint, reduces labor cost, and work in process, all leading to a cost competitive product.

SUPERB CASE STUDIES

LATTICELL™ Energy Absorbers

The patented LATTICELL™ Energy Absorber provides unique safety benefits to automotive manufactures (see page 48), but presents unique manufacturing challenges because of its complex geometric structure. The LATTICELL™ is “pretzel” shaped with numerous bends and holes, multiple fasteners, and welded joints. Because of these challenges, the product developers selected SUPERB as their North American manufacturing partner because of its unique Bihler manufacturing capability.

SUPERB engineers developed a LATTICELL™ manufacturing cell which consists of a material leveler, a Bruderer stamping press, and a Bihler machine. This cell is centrally controlled to ensure that all process steps are completed in the correct sequence from the time the material leaves the coil until the finished formed, welded, and punched LATTICELL™ with fasteners is dropped in the shipping container— at a rate of 1,200 finished components an hour.

The flexible nature of this cell allows the customer to calibrate the amount of energy the LATTICELL™ absorbs by simply changing tooling modules.

LATTICELL™ manufacturing cell works to produce safety components found in many vehicles on the road.



A Bihler technician sets tooling.



High Speed Tapping and Contact Welding

Another Bihler solution engineered by the SUPERB team feeds brass and silver to the Bihler system and converts these strips into an assembly ready engineered component. This integrated solution eliminates numerous separate operations and combines them into one. The brass strip is fed, extruded, formed, coined, and tapped in one process. Concurrently, the silver is fed and cut to the correct size, then transferred and welded to the brass terminal.

If this sounds like a lot of steps being combined into one operation, it is! However, it does not reduce process output. In fact, it enhances it. This Bihler process runs at the incredible speed of 12,000 finished components per hour.

Thermostatic Contact Assembly

A thermostatic contact assembly requires a productivity boost to maintain global competitiveness. The assembly consists of a nickel

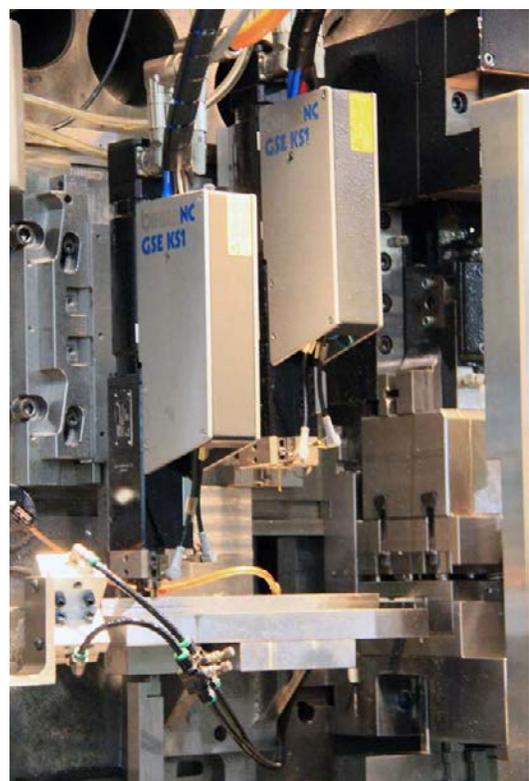
plated steel terminal, a stainless steel flat spring, a beryllium copper spring, and a silver contact.

The customer's original process design manufactured each of these components on a separate process and then finally combined them all in multiple assembly cells. A total of 13 direct people were needed to manufacture the 11 million assemblies needed to meet global demand.

The SUPERB Bihler solution combined all these operations into one integrated process to produce all the component parts and weld the assembly with an hourly output of 7,600 finished assemblies. Not only was the manufacturing reduced to about 400 square feet, the entire global demand can be met using two direct people with manufacturing capacity to spare.

With these SUPERB Bihler solutions, we manufacture more than product—we automate the manufacture of savings for our customers so they can remain globally competitive.

High speed Servo tappers work in conjunction with Bihler machinery.



*Thermostatic
contact assembly
manufacturing cell
in the SUPERB
manufacturing
complex produces
millions of
components annually.*



MEDICAL

MAKING REHAB A BETTER PLACE

Let's face it, the words "traction" and "rehabilitation" are not ones you want to hear from the doctor. However, it is reassuring to know that the equipment used is superbly made.

Exclusive Partner

After undergoing an extensive evaluation process, FDA registered SUPERB, was selected to provide traction solutions for a global health care company. As the sole source partner for the company's health care industry's traction products, the SUPERB medical team puts superior quality at the forefront of each component it manufactures.

For the medical team, it is more than "just" components they are manufacturing; they are assisting in patients' rehabilitation. So if the medical team can produce top

quality items for hospital beds for patients from infants to adults, their job is quite meaningful.

Exact Manufacturing

Using stainless steel, aluminum, steel, and brass, the SUPERB team receives the blueprints for parts from the customer and then develops a process to manufacture the pieces for each traction mechanism, according to its specifications. Exact tolerances and strict manufacturing guidelines are used with each

assembly and subassembly. From there, each traction solution passes a quality inspection prior to being shipped.

FDA registered SUPERB produces around 150 finished medical goods and hundreds of subassemblies for those finished goods. The medical team takes pride in each component it produces because the health and safety of patients across the globe is at stake. It is SUPERB's chance to make rehab a little bit better with every traction solution produced.

There is a prescription for a safer, faster, and better rehabilitation process—and it all begins at SUPERB.

SUPERB's medical team is proud to manufacture many of the components used on hospital traction beds. SUPERB's quality and exact standards ensure patient safety and promote fast healing.



*Similar to a
NASCAR pit
crew, team
members
know their
job and
perform it
with superior
skill and
speed.*



ASSEMBLY

ADDING VALUE TO EVERYTHING SUPERB

Teamwork is personified in the SUPERB Assembly Department, as team members work together building components.



From truck cap locks to wire harnesses, and hinges to key locks, the assembly team is a well-oiled machine of efficiency.

Finding Better Ways

Specialized assembly tables and a streamlined work process designed by the assembly team ensures that optimum productivity can be achieved.

Using a work cell concept, staffed with experienced assemblers, who are compensated for productivity, provides a very cost effective high quality assembly service.

Additionally, SUPERB stocks components for customers so that custom manufactured assemblies can be shipped directly to the customer on a just-in-time basis.

Valuable Teamwork

From truck cap locks to wire harnesses, and hinges to key locks, the assembly team is a well-oiled machine of efficiency. The advantage of having seasoned employees is that each task is about teamwork to ensure parts are assembled correctly. Similar to a



NASCAR pit crew, team members know their job and perform it with superior skill and speed, assembling a component to its exact specification.

Whether they are drilling, crimping

terminals on a component or assembling key locks, the SUPERB assembly team is a fast, efficient, and valuable part of SUPERB Industries—not to mention a true asset for the customer, who receives parts with unbeatable value.

PERFORMANCE

Millions of parts are manufactured annually at SUPERB. Each engineered component is superiorly crafted in Sugarcreek, Ohio, and shipped to customers around the globe.





QUALITY

Beyond ISO to SUPERB9000

“It is not easy to impress me. I am impressed by SUPERB. This company embodies the spirit behind the ISO standard better than almost any company out there.”

Pamela Bethune, Auditor
TÜV-SÜD
Munich, Germany



SUPERB manufactures millions of engineered components with precious and non-precious metals and precision plastic parts from engineered polymer resins.



Some companies fly the ISO flag by their entrance to show their quality accreditation. At SUPERB, quality is simply everyone's modus operandi.

A Higher Standard

Even though SUPERB is certified to the ISO/TS16949 specification, SUPERB management and team members are not satisfied with "just" meeting the standard.

"We have never just tried to do the minimum requirement. We focus on the intent and principles of the ISO standard and then use it to our benefit," says Susan Miller, quality management representative. "The goal at SUPERB is to be consistent, exceed our customers' expectation, and continually improve. This is how we surpass the ISO standards and truly take SUPERB to a new level—from ISO-9000 to SUPERB9000."

In-House Laboratory

But how does SUPERB ensure that quality standards are met with every procedure conducted?

The Quality Control Lab is climate controlled and houses precision instruments and special gaging to verify the quality of all manufactured components. Every process at SUPERB has a control plan that prescribes the quality verification that is required and at what frequency. Additionally, the control plan dictates a prescribed reaction plan in the event a nonconforming condition occurs. Each press technician is responsible for the process and conducts individual quality inspections.

A SUPERB Quality

The quality certification from TÜV represents SUPERB's compliance to the ISO/TS16949 specification, providing a process-based quality system, which is a solid infrastructure and significant reason for SUPERB's ongoing success.



"SUPERB is definitely one of the top ten, if not one of the top five in terms of adherence to quality systems and the principles of ethical manufacturing and leadership."

It's not just TÜV auditors who have high praise for the caliber of SUPERB's quality standards. Recently, a customer visited SUPERB to audit the quality program. The audit revealed the highest score in the VDA section of the audit that was ever given to a potential supplier. Proof yet again that SUPERB's quality exceeds the standards and others in the manufacturing industry.

Maintaining high (or SUPERB) standards is possible due to the dedication of every team member. The quality department may only have two employees with "quality" in their titles, but quality resides in the hearts of every SUPERB employee and is simply a way of doing business.

On-Time at the Right Time

DELIVERY

Two words to describe SUPERB's delivery are "dependable" and "flexible."

While some companies talk about making deliveries, they do little more than simply mail a package. SUPERB shines a new light on delivery—it is delivered on-time and at the right time, according to the customer's specifications.

Forecasting Flexibility

Whether it is forecasting ahead 12 weeks or looking back at the previous 12 weeks, SUPERB meets the demands of customers so they can meet the needs of their customers. If there is a spike in the customer's demand, SUPERB can fulfill the required needs to guarantee all parties meet their

deadlines with shipped goods.

It may be difficult to imagine but SUPERB only ships what is required by the customer—not more—not less. Through detail-oriented planning and communication, deliveries arrive at the slated time with the required amount of finished goods. Daily, weekly, and monthly planning is done with sophisticated Enterprise Resource Planning (ERP) software, providing the customer with the peace of mind that their parts will be delivered when they need them.

Customer Service

Customers want the flexibility to move up or push back orders to accommodate fluctuations in demand. A variation in the regular

shipping status affects SUPERB's production timeline; however, those fluctuations can be accommodated due to SUPERB's planning and superior production processes.

By understanding that customers need to receive parts at different times, SUPERB is prepared to deliver. The ability to adjust shipping and delivery times is a huge advantage for customers and another reason why SUPERB is preferred over other companies to manufacture components.

Global Shipping

Utilizing numerous forms of distribution, SUPERB's shipping and receiving department packages manufactured parts to specification ensuring fast delivery. Delivering throughout the United States and across the globe, SUPERB is familiar with shipping tariffs and customs regulations. With customers in Mexico, Canada, Germany, China and Hong Kong, SUPERB still delivers on-time at the right time, no matter where the final destination is.

Going Above and Beyond

The SUPERB team adheres to the philosophy that the customer's production line must never be shut down. SUPERB is committed to taking whatever steps are necessary to ensure that a production line is not shut down.

Here's an example of how SUPERB keep production lines running:

Situation: A customer missed placing an order for engineered electrical connectors within the prescribed lead time required for material acquisition, manufacturing, plating, and post processing.

Consequence: Without delivery of the engineered electrical connectors to the customer, their assembly line and their customer's assembly line would be shutdown.

SUPERB's Solution: Upon learning about the situation and the unacceptable consequence of line shutdowns, the SUPERB customer service and planning team took action to ensure an expedited delivery.

The first step was to expedite the delivery of raw material to SUPERB so the manufacturing process could begin. This required SUPERB planners to make special arrangements with our raw material supplier to pull our order ahead of other orders in the pipeline.

Next, the raw material was shipped to SUPERB via expedited freight and then stamped into unplated electrical connectors immediately upon receipt. Then the stamped connectors were transported via courier to the precious metal plating house in Pennsylvania for processing on an expedited basis.

SUPERB had a courier waiting to bring the connectors back to SUPERB for further processing the minute they came off the plating line. Upon arrival in Sugarcreek, the plated connectors were loaded onto a high speed stamping press for forming, singulation, and final inspection.

Just twenty-four hours after the raw material arrived at SUPERB's dock, finished plated and formed connectors were en route to the customer via another courier arriving shortly before midnight and just in time to prevent an assembly line shutdown.

On-time at the right time is always critical, but especially in such critical situations where a line shut down is at stake. Delivering an expedited solution in such a critical time frame requires the concerted effort of a SUPERB team and strong relationships with raw material and plating service suppliers.

The SUPERB team understands that the customer's production line must not be shut down.





*Support personnel
in the Global
Headquarters
provides prompt
and thorough
service.*

SUPPORT

Home Office, Michigan, Hong Kong

SUPERB's technical support offices solve problems faster and better.

Reaction time in the global manufacturing arena is not measured in months, weeks, or days, but in hours and, sometimes even, minutes. Therefore, SUPERB has developed a plan to provide top quality customer service whenever—and wherever it is needed.

Customers often have to respond to their customers quickly, and if SUPERB is able to shorten that amount of time, SUPERB has been successful. It is quite simple. SUPERB wants to help customers solve their problems. Therefore, having a nearby support office can speed up that process.

Global Headquarters

Sugarcreek, Ohio is home to SUPERB Industries. With full support, production and planning, the Innovation Plaza complex is a hub of activity. Encouraging customers to visit SUPERB's facility can be enlightening and provide an inside look at SUPERB. Many diverse operations, such as high speed stamping, tool building, Bihler forming, plastic molding, over molding, and medical device manufacturing can be seen daily.

With several customers located nearby, it is not uncommon to hear a sales engineer chatting on the phone, only to say: "Wait a minute. I'm going to leave now. I'll be right over, and we can talk about

this in person." SUPERB's close proximity to some customers offers continuity and a faster resolution of either new concepts or problems. Being able to visit with a customer in a timely fashion is always the preference.

Currently, SUPERB Industries has three technical support offices, two in Michigan and one in Asia. Plans are underway to open more satellite offices in close proximity to customers to provide additional support.

Michigan Technical Support Offices

Due to the number of SUPERB's automotive customers located in Michigan, a Detroit Technical Support Office and Grand Rapids Technical Support Office was formed to provide faster service to those customers. With sales engineers who have decades of experience in the manufacturing and engineering industry, questions can be answered and potential problems can be solved in a very timely manner.

The location of the Michigan technical support offices allows engineers to be in front of a customer in a matter of hours, sometimes minutes. This type of customer service is rare in today's world. But at SUPERB, there is still a belief that a relationship needs to be formed with customers. In fact, gaining a customer's confidence is our top priority. Face-to-face interaction is the norm, not the exception.

Hong Kong Technical Support Office

Due to the number of SUPERB's customers in Asia, Hong Kong was chosen for the site of the SUPERB's Asian technical support office. This strategic placement of the facility provides a central location in the Far East.

SUPERB exports parts from its Sugarcreek facility that are assembled in China. These parts are used in finished goods or are components for subassemblies.

The purpose of this distribution center is to support Asian customers. Fulfilling their varying weekly requirements from a nearby location is critical. The Hong Kong office reduces transport time and ensures an overall on-time delivery capacity by supporting SUPERB's customers from that geographical area.



The Hong Kong office provides Asia with local support and service.



PARTNERSHIP

Therm-O-Disc + SUPERB: A Global Partnership to be the Best

Steve Motter



SUPERB Industries and Therm-O-Disc have built a global partnership to be the best and remain competitive. While Therm-O-Disc and SUPERB headquarters are a mere 55 minutes apart, they have teamed to support operations in Mansfield, Ohio, Mexico, and Asia with millions of engineered components each year. In 2001, SUPERB stepped in the gap to assist Therm-O-Disc with a manufacturing problem and this “one time solution” has grown into a long term partnership.

Steve Motter, Vice President of Supply Chain states, “The unique thing about SUPERB is that they stand behind their work and quality. They never surprise us with cost overruns. If there is one, they absorb it themselves. SUPERB continues to find ways to bring value to our supply chain and innovate to compete with off-shore competitors.”

A “global competitor” with a “can do” attitude and an “ongoing ability to think outside the box” is how Therm-O-Disc managers describe SUPERB Industries.

Meeting the Need

Many manufacturing companies produce parts. While SUPERB’s production lines fulfill orders, SUPERB knows that a true business partnership is built on trust—trust that each engineered component meets all specifications all of the time.

Therm-O-Disc Commodity Manager Helga Kovacs Hursh describes this level of confidence this way: “SUPERB has been able to produce a quality product at a globally competitive price by meeting our perfect execution requirements of delivery frequency, carrying the required safety stock, and being flexible so we are aligned with our customer expectation. They have a very qualified and skilled workforce that has presented various cost savings and design change opportunities.”

Purchasing Manager Ron Vrooman values the partnership with SUPERB because he likes SUPERB’s willingness “to accept and embrace

Ron Vrooman, Helga Kovacs Hursh, and Tim Chapman review a SUPERB proposal.



the challenges” that are presented. “SUPERB has a willing and eager approach to satisfy the customer. We have many needs to have a value added product and SUPERB is capable of being globally competitive with the value added and total cost.”

Instead of seeing a customer as simply a “purchaser,” SUPERB embraces the challenge to improve and refine its process, which has a direct correlation to the customer’s final cost. “When we challenge SUPERB with new requirements, their approach and attitude is to do whatever it takes to satisfy those needs. It is refreshing to hear a ‘can do’ instead of hearing a host of reasons why they cannot,” says Vrooman.

Finally, Commodity Manager Tim Chapman says he loves to work with SUPERB because they have the ability to “get us out of crisis, such as press break downs, supply interruptions due to supplier bankruptcies, and off shore problems.”

Innovating for the Future

SUPERB manufactures millions of engineered components for Therm-O-Disc, but it is not satisfied with the status quo. In fact, SUPERB is actively developing product and process enhancements to reduce precious metal content in Therm-O-Disc products so they can remain a market leader in their industry.

“We have been in dialogue on how to develop electrical contacts having lesser material volume which will carry the same electrical ratings and required cycle life,” explained Richard Rudolph Manager of Product Engineering, “We currently have one on test and are developing several more. I’m sure there will be more ideas to discuss because innovation doesn’t cease at SUPERB, whether it is in tool designs, assembly methods, or cost reduction.”

This type of collaboration is possible because, “SUPERB has taken time to understand our part requirements and specifications. This, along with their technical expertise in fabrication and high volume component parts assembly, allows them to supply us quality parts at a super competitive price,” says Rudolph. “The automated assembly processes utilized by SUPERB also ensures we will get a consistent part.”

SUPERB’s commitment “to be superb” includes helping our customers “to be the best.” This commitment takes cliché out of the word partner to build an innovative and productive relationship.

Richard Rudolph and John Miller engineer the next cost reduction.



Five Star Safety

LATTICELL™

SUPERB Industries continues its quest to make the world a better—and safer—place, one engineered component at a time. One way SUPERB does this is manufacturing LATTICELL™ Energy Absorbers.

Exclusively Made by SUPERB

SUPERB is the only licensed manufacturer in North America to produce this innovative product. The LATTICELL™ Knee Bolster is installed in passenger cars and light trucks to absorb energy similar to a knee airbag at a substantially lower cost. Early adopters of this technology have been GM and Chrysler on more than four platforms including the Jeep Grand Cherokee and the Dodge Durango.

Partnering with INDUS Concepts & Engineering, LLC of Troy, Michigan, SUPERB has been manufacturing the LATTICELL™ for four years, which includes several updated improvements that have continued to enhance safety. Taking the place of a heavy and costly lower body airbag, the LATTICELL™ Knee Bolster absorbs energy during an automotive crash.

The high-strength steel LATTICELL™ energy absorber is manufactured in a sophisticated Bihler manufacturing cell. The Bihler automation helps keep the piece cost down and

provides configuration flexibility. SUPERB is currently manufacturing 1.5 million LATTICELLS™ each year and has installed capacity to make another two to three million.

The LATTICELL™ Advantage

The newest version of the LATTICELL™ energy absorber is manufactured at a much lower cost

compared to the “typical” airbag, and is highly compact and lightweight. The key advantage of LATTICELL™ systems over other structures is its remarkable tunability, which crash and safety engineers love. These are low-cost, lightweight structures that are capable of fully meeting the femur load requirements per the FMVSS 208 frontal crash standards with unbelted occupants.

Computer models calculate the forces and deflection necessary in the LATTICELL™ Energy Absorber system to ensure passenger safety.



The government's New Car Assessment Program (NCAP) publishes star ratings based on belted occupant testing. Recently, the government's five-star rating in frontal crashes started to include leg injury criteria, in addition to the chest and head injury criteria. The femur loads need to be very low to obtain the five-star rating. This is a challenge because the structure needs to be made "softer" to reduce the femur loads in NCAP testing; however, a "softer" structure may not pass the unbelted testing due to the higher impact energy involved.

The new five-star safety-capable structure provides very low femur loads in NCAP belted testing, while meeting the FMVSS 208 unbelted testing requirements as well. With the tightening of Corporate Average Fuel Economy (CAFE) requirements, OEMs are looking for lightweight structures throughout the automobile. In order to meet the five-star rating, OEMs focus on knee airbags. However, traditional knee airbags add several pounds to

the car's weight and are also more expensive than a LATTICELL™. A typical five-star safety-capable LATTICELL™ driver side knee bolster system is comprised of two energy absorbers and a reaction plate, weighs a mere 2 to 2.5 pounds, costs a fraction of a knee airbag and does not have any out-of-position occupant injury apprehensions.



By uniting with INDUS, SUPERB is able to utilize its automated Bihler technology to manufacture the LATTICELL™ that continues to reduce injuries and save lives during automobile crashes—and that life-saving work begins at SUPERB with every component manufactured.





Bihler is headquartered in the shadow of the Neuschwanstein Castle in Southern Bavaria, Germany

A PARTNERSHIP FOR INNOVATION





“Made in Germany” quality in The Little Switzerland of Ohio.

SUPERB Industries is headquartered in Sugarcreek known as The Little Switzerland of Ohio and home of the world's largest cuckoo clock.



c/o Mr. John Miller
SUPERB Industries, Inc.
100 Innovation Plaza
PO Box 708
Sugarcreek, OH 44681
USA

Sehr geehrter Herr Miller,

es ist mir eine besondere Freude und Ehre, Ihnen einige Anmerkungen zur Partnerschaft zwischen Ihrem Unternehmen und Bihler für Ihre Firmenchronik zu nennen:

Begegnungen mit außergewöhnlichen Menschen schaffen Lebenserfahrungen und Eindrücke, welche für die Zukunft eine Beständigkeit erfahren werden. Ich erinnere mich sehr gut an das erste Zusammentreffen mit Herrn John Miller und seinem Sohn, als ich mit meinem Vater von der IMTS Show in Chicago nach Newark geflogen bin, und anschließend von Herrn John Miller, in Begleitung seines Sohnes Daniel, zum Hotel in der Nähe von Bihler of America gebracht wurde. Durch meine begrenzten Englischkenntnisse wuchs meine Unsicherheit, denn ich wusste nicht, wie sich die Fahrt zur Unterkunft, im Hinblick auf die Kommunikation, entwickeln würde. Nachdem wir alle im Fahrzeug saßen, fing mein Vater sofort an, mit Herrn Miller über Stanz-Biege- und Montagetechnologie zu sprechen. Dieses selbstverständlich in englischer Sprache, da mein Vater sich gewisse Grundkenntnisse der Sprache in seiner Kriegsgefangenschaft in den USA als 16-jähriger aneignen konnte. Sein Sohn Daniel saß neben mir auf der Rücksitzbank und wir haben den Verkehr auf dem Highway beobachtet. Plötzlich sagte Herr Miller zu Daniel: „Daniel, schwätz mit Mathias!“ Von diesem Zeitpunkt an war das Eis gebrochen, und wir konnten uns in der deutschen Muttersprache unterhalten. In unserem gemeinsamen Gespräch kam zutage, dass die Vorfahren von Herrn John Miller deutscher Abstammung waren, wodurch eine Beziehung zwischen der Familie Miller und Bihler entstand, die sich bis heute zu einer geschäftlichen und freundschaftlichen Partnerschaft entwickelt hat.

Ein weiteres Zusammentreffen mit Herrn John Miller durfte ich erfahren, als Bihler of America ein Fertigungsverfahren für Kupplungsringe, die für Chrysler bestimmt waren, entwickelt hatte. Hierbei hat Herr Miller, als ehemaliger Mitarbeiter von Bihler of America, in Zusammenarbeit mit dem bereits verstorbenen Gesellschafter Vulgens Schön, das Projekt hervorragend abgewickelt. Ich war damals außerordentlich erstaunt, welche Dokumentation und Anleitung für das Betreiben der Anlage Herr Miller für den Kunden angefertigt hatte. Heute würde ich sagen, dass Herr Miller seiner Zeit Jahrzehnte voraus war, denn diese Art und Weise einer Dokumentation wurde im Jahre 2005 als Stand der Technik erklärt. Zu diesem Projekt wäre auch noch zu erwähnen, dass die damalige Bihler-Maschine GRM 80 die Platinen gebogen, am Stoß miteinander verschweißt hatte, die geschweißten Ringe auf einem Förderband abgelegt wurden, welches die Teile an eine Presse weiterleitete, in welcher sie dann ihre endgültige Formgebung erfuhren.

“Bihler technology is recognized worldwide as a leading manufacturing process for stamped and formed parts.”

“Encounters with extraordinary people create life experiences and impressions that endure into the future.”

BIHLER

Die Bihler-Technologie ist heute ein weltweit etabliertes Herstellungsverfahren von Stanz-Biegeteilen aus metallischen und nicht metallischen Bändern und Drähten. In die Stanz-Biegetechnik lassen sich zusätzliche Verfahrenstechnologien, wie Schweißen, Gewinden und Schrauben integrieren, um am Ende des Fertigungsprozesses, ein fertiges Bauteil in konstanter Qualität zur Verfügung zu haben. Ein weiterer Nutzen bei der Anwendung der Bihler-Technologie, besteht darin, dass aus dem gefertigten Stanz-Biegeteil, durch das Zuführen von Kunststoffteilen bzw. anderen Komponenten, eine komplette Baugruppe entsteht, wodurch der Anwender eine hohe Wertschöpfung erfährt. Mittels der Bihler-Technologie lassen sich Präzisionsbauteile herstellen, die in kleineren und größeren Losgrößen, sowohl von der Automobil- und Elektroindustrie, als auch von weiteren Industriebereichen auf den Märkten, benötigt werden. Mit gut ausgebildeten Fachkräften lässt sich mit der Bihler-Technologie eine höchste Produktivität erzeugen, die unseren Kunden eine enorme Wettbewerbsfähigkeit auf den globalen Märkten ermöglicht. Die Anwender, die unsere Technologie richtig einsetzen, verbessern ihre Marktstellung und bauen hiermit ihre Arbeitsplätze Zug um Zug aus, und tragen hierdurch auch zum Erhalt der derselben bei.

Zu Unternehmen, die familiären Charakter und Kultur besitzen, hat sich eine hervorragende Partnerschaft entwickelt, die sich über viele Jahrzehnte weiterentwickelt hat. Eine Partnerschaft sollte man leben, welches eine offene und ehrliche Arbeitsmethodik zwischen den Partnern erfordert. Bihler lebt eine fundierte Partnerschaft mit dem Unternehmen Superb Industries, die sowohl in unserer Niederlassung Bihler of America, wie auch bei Bihler Deutschland gelebt wird. Die Firmengründung von Bihler of America, die 1976 stattfand, ist dahingehend ausgerichtet, eine örtliche Nähe zu unseren Kunden in Nordamerika zu haben, um somit den Service und die Unterstützung für unsere Kunden sicher gewährleisten zu können. In den fast 40 Jahren hat sich Bihler of America zu einem Unternehmen von 250 Beschäftigten entwickelt, dessen Kernmannschaft stets für unsere Kunden verfügbar ist. Bihler ist sehr stolz, seit 25 Jahren das Unternehmen Superb Industries zu unterstützen, und wir werden alle Energie auch zukünftig einbringen, um gemeinsam den Herausforderungen bzw. auch Anforderungen des Marktes gerecht zu werden. Die Firmenkultur von Superb Industries, vorgelebt von den Gesellschaftern, wie auch die unterschiedlichsten Produktionstechnologien von Superb, sind Vorbild für das erfolgreiche Herstellen von Bauteilen und Baugruppen aus Metall und Kunststoff.

Sehr geehrte Familie Miller, sehr geehrte Belegschaft, vielen Dank für Ihr Vertrauen in die Bihler-Technologie, welches für uns die Verantwortung bedeutet, auch zukünftig Ihren Anforderungen gerecht werden zu dürfen.

Sehr geehrter Herr Miller, auch möchte ich es nicht versäumen, mich an dieser Stelle nochmals recht herzlich für Ihr schönes Geschenk zu unserem 60-jährigen Firmenjubiläum zu bedanken. Es wird einen besonderen Platz bekommen.

Mit freundlichen Grüßen

Otto Bihler
Maschinenfabrik GmbH & Co. KG

Mathias Bihler

Geschäftsführender Gesellschafter



Mathias Bihler
Managing Director
Otto Bihler Maschinenfabrik GmbH & Co. KG

I remember very well my first meeting with Mr. John Miller and his son after I flew with my father from the IMTS show in Chicago to Newark. Afterward I was taken by Mr. John Miller, accompanied by his son Daniel, to our hotel close to Bihler of America. Because of my limited comprehension of English, I grew increasingly insecure, because I was not sure, how the drive to our lodging would go with regard to our communication. After we were seated in the car, my father immediately started talking with Mr. Miller about stamping, forming, and assembly technology—my father was able to gain some basic knowledge of the language as a 16 year old prisoner of war [WWII] in the USA. His son Daniel sat next to me on the backseat and we were watching the traffic on the highway. Suddenly Mr. Miller told Daniel [in German]: “Daniel, chat with Mathias.” From this moment on the ice was broken and we could converse in our German native tongue. Our conversation revealed that the ancestors of Mr. Miller were of German descent, which led to a relationship between the Miller family and Bihler that to this day has developed into a business and amicable partnership.

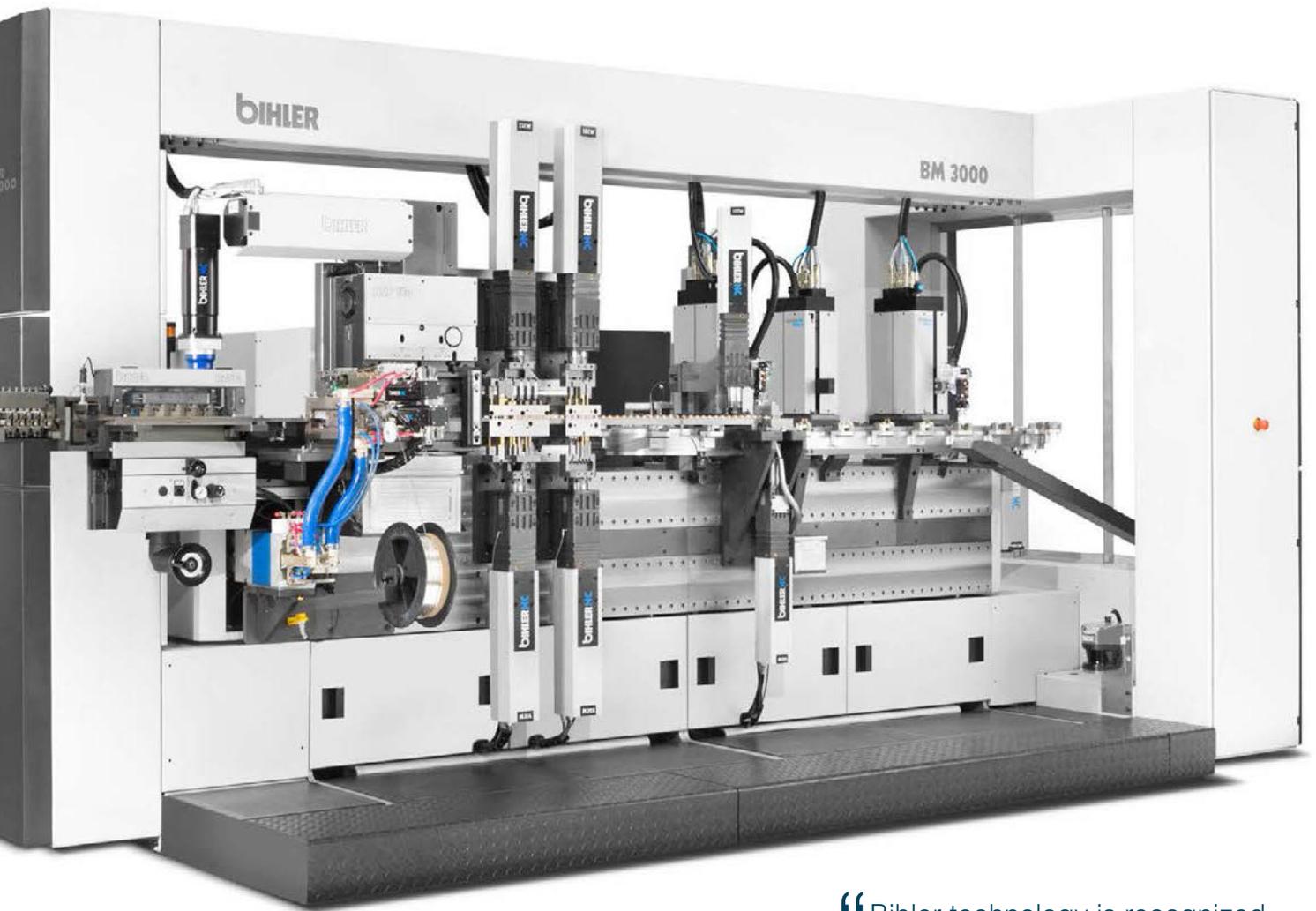
I had another meeting with Mr. Miller when Bihler of America was developing a manufacturing process for transmission rings for Chrysler. Mr. Miller, who is a former employee of Bihler of America, in cooperation with the now deceased partner Vulgens Schön, managed the project in an excellent manner. At that time I was exceptionally amazed at the kind of documentation and equipment operating instructions that Mr. Miller prepared for the customer. Today, I would say that Mr. Miller was decades ahead of his time because this kind of documentation was declared the technical standard in 2005. Concerning this project, it should also be mentioned that the Bihler GRM 80 [machine] bent the rings and then welded them together with a resistance butt weld. The welded rings were placed on a conveyor belt, which transported the rings to a press, where they then received their final form.

With companies that have a family character and culture an outstanding partnership developed and has been further developed over the many decades. A partnership should be lived, which requires an open and honest working method between the partners. Bihler enjoys a well-founded partnership with SUPERB Industries, both at our subsidiary Bihler of America as well as at Bihler Deutschland. Bihler of America was founded 1976 to be located closer to our customers in North America in order to guarantee service and support for our customers. In the nearly 40 years Bihler of America developed into a company with 250 employees whose core team is constantly available to our customers. Bihler is very proud to have supported SUPERB Industries for 25 years and in the future we will use all our energy to meet mutual challenges and the requirements of the market. The corporate culture of SUPERB Industries, exemplified by its owners, as well as the diverse production technologies of SUPERB are an example for the successful manufacturing of components and modules made out of metal and plastic.

With best regards,

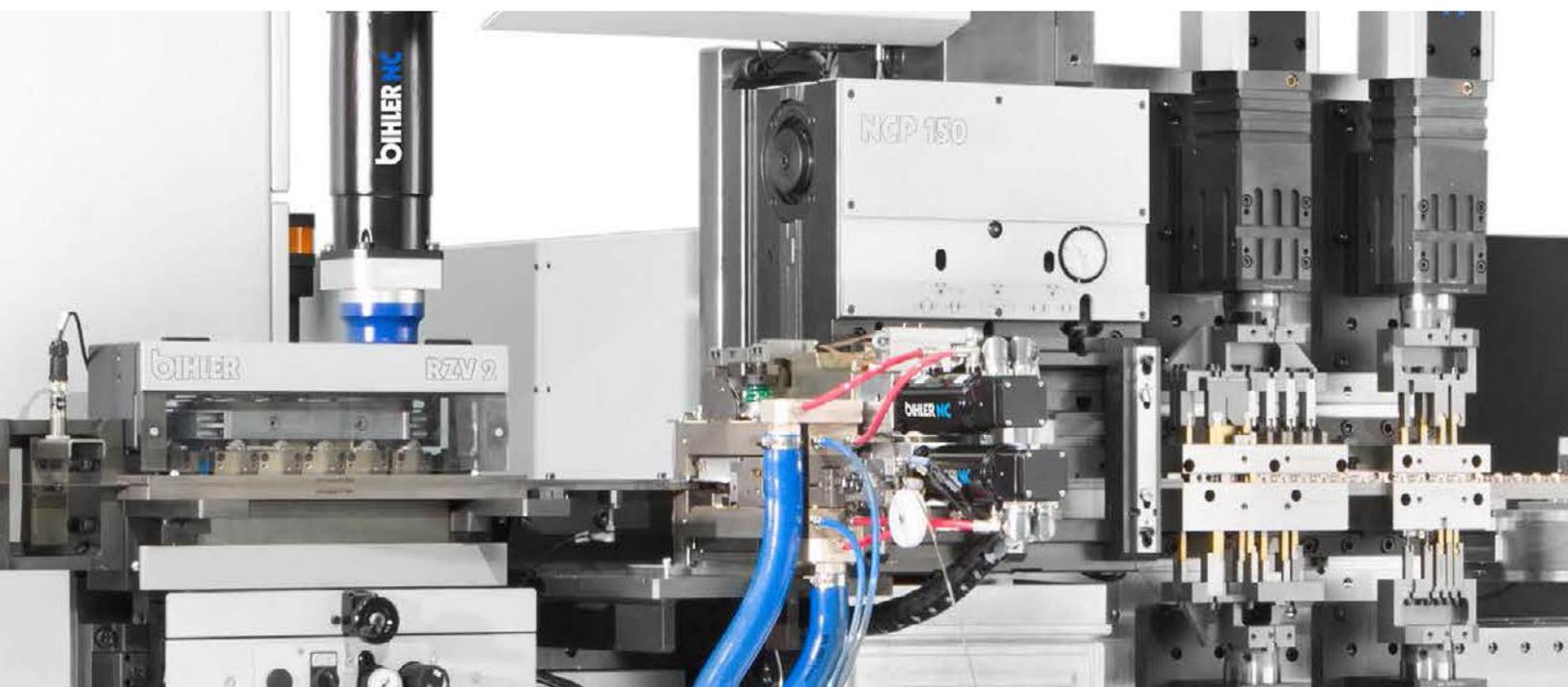
A handwritten signature in black ink, appearing to read 'M. Bihler', written in a cursive style.

Mathias Bihler
Managing Director
Otto Bihler Maschinenfabrik GmbH & Co. KG



“ Bihler technology is recognized worldwide as a leading manufacturing process for stamped and formed parts from metallic and nonmetallic strips and wires. A further benefit of the Bihler technology is that plastics and other components can be assembled to stamped and formed parts to produce a complete module which provides high added value for the user. ”

–M. Bihler



“ Precision components can be produced in smaller and in larger batch sizes as needed by the automobile and electrical industry, as well as other industries in the market. ”

–M. Bihler



“ Bihler also integrates additional process technologies like welding, tapping, and fastener insertions into the stamping and forming so that at the end of the manufacturing process a finished component of consistent quality is produced. ”

–M. Bihler



FUTURE

SUPERB is dedicated to educating tomorrow's technicians through the SUPERB Technical Institute where apprentices work alongside SUPERB journeymen tool and die makers and press technicians, while earning their own certification.





CREATING JOBS WITH A FUTURE

There are not many companies that believe so strongly in their training program that they create a technical school, but that is exactly what SUPERB Industries did.

Class is In Session

SUPERB Technical Institute (STI) was created by SUPERB president John Miller to train tomorrow's technicians on a foundation of timeless values by implementing the age-old practice of learning by apprenticeship.

During two, three or four-year apprenticeship programs (Bihler Press Technician, Stamping Press Technician and Tool & Die Maker), SUPERB skilled craftsmen will teach STI apprentices (students) about production processes, so the apprentice can apply the talents to make tooling and manufacturing processes capable of producing millions of metal and plastic parts.

A joint training initiative between SUPERB, Buckeye Career Center and L.I.G.H.T., STI focuses on preserving the value of craftsmanship. STI students, who complete an apprenticeship program have exceeded the minimum standards of the industry and are accredited by the U.S. Department of Labor and the Ohio Apprenticeship Council.

Very similar to the Bihler Company in Germany, SUPERB puts a great deal of emphasis on apprenticeship learning. The Bihler bClever program has proven that learning by seeing and doing alongside of an experienced and accredited professional works, and the long term results exceeds the "traditional" classroom instruction. STI gives students the ability to demonstrate why quality craftsmanship is not a thing of the past—rather it is a time tested way to earn a living and make the world a better place.

The Mentor and the Apprentice

STI offers certificate and apprenticeship programs that are nationally recognized and train apprentices while working a paying job at SUPERB Industries. The courses and tuition are paid by SUPERB, leaving only the expense of the tools of the trade and the books to be financed by the apprentice.

For Lee Heilman, SUPERB Industries' tooling manager, the experience of being a STI mentor and instructor is not only rewarding personally but professionally, too.

SUPERB {inside}: Why do you think having STI right here at SUPERB is a win-win for students and instructors?

Lee Heilman: Over the years, many companies have eliminated onsite teaching programs and training classes. While some companies

continue to support online training for employees, it is critical for students to be able to work side-by-side with a mentor and learn by seeing and doing a task.

SUPERB {inside}: How has being a STI mentor and instructor helped you improve your job at SUPERB?

Lee Heilman: For me, it is routine to just do a job—not think about it—but simply complete a job. I know what needs done and I do it. That's what I've been trained to do. However, when I have an apprentice working with me, I have to slow down and be aware of everything that I'm doing so I can explain it. Replicating a job and explaining it step-by-step gives me greater understanding of what there is to do in the tool room rather than just doing a number of steps to get a job finished.

SUPERB {inside}: What have you enjoyed most about being a STI instructor and mentor?

Lee Heilman: Seeing an apprentice grasp on to a concept that they didn't know before is a very rewarding thing. Sharing the knowledge of what I do in the tool room with someone else really makes me feel good.

Amy Cappon has been with SUPERB Industries for eight years, three of which she's been a press technician. For her, the opportunity to enroll in STI is a definite job benefit.

SUPERB {inside}: Why did you decide to take STI classes and work toward your stamping press technician certificate?

Amy Cappon: The only other program like this is over six hours away. Taking STI classes here at work is a plus. I don't have to travel to class; I'm already familiar with the equipment, and I know my instructors.

SUPERB {inside}: You are enrolled in a press technician apprenticeship program but you are already working as a press technician. Why take the classes?

Amy Cappon: After completing the program, I will be more efficient on the presses, and in the meantime, I'm learning everyday. It's more than just getting a piece of paper saying I completed the program. If I can improve my skills, I want to do it.

Connecting the Past to the Present

With the completion of the second year of classes, the growth of STI continues. The apprenticeship programs have proven that the ways of old are still relevant in today's high-tech society. In fact, 91 course completion certificates were earned by 24 STI students in just one year. SUPERB employees continue to improve their skillsets and refine their job procedures.

STI apprentices pursue these time tested skillsets with the same passion as Christian "Schmidt" Miller did ten generations ago, proving that hard work and dedication still pays dividends in satisfaction and tangible products.



SUPERB Technical Institute apprentice Loyal Miller lines up a component on a milling machine in the SUPERB tool room.

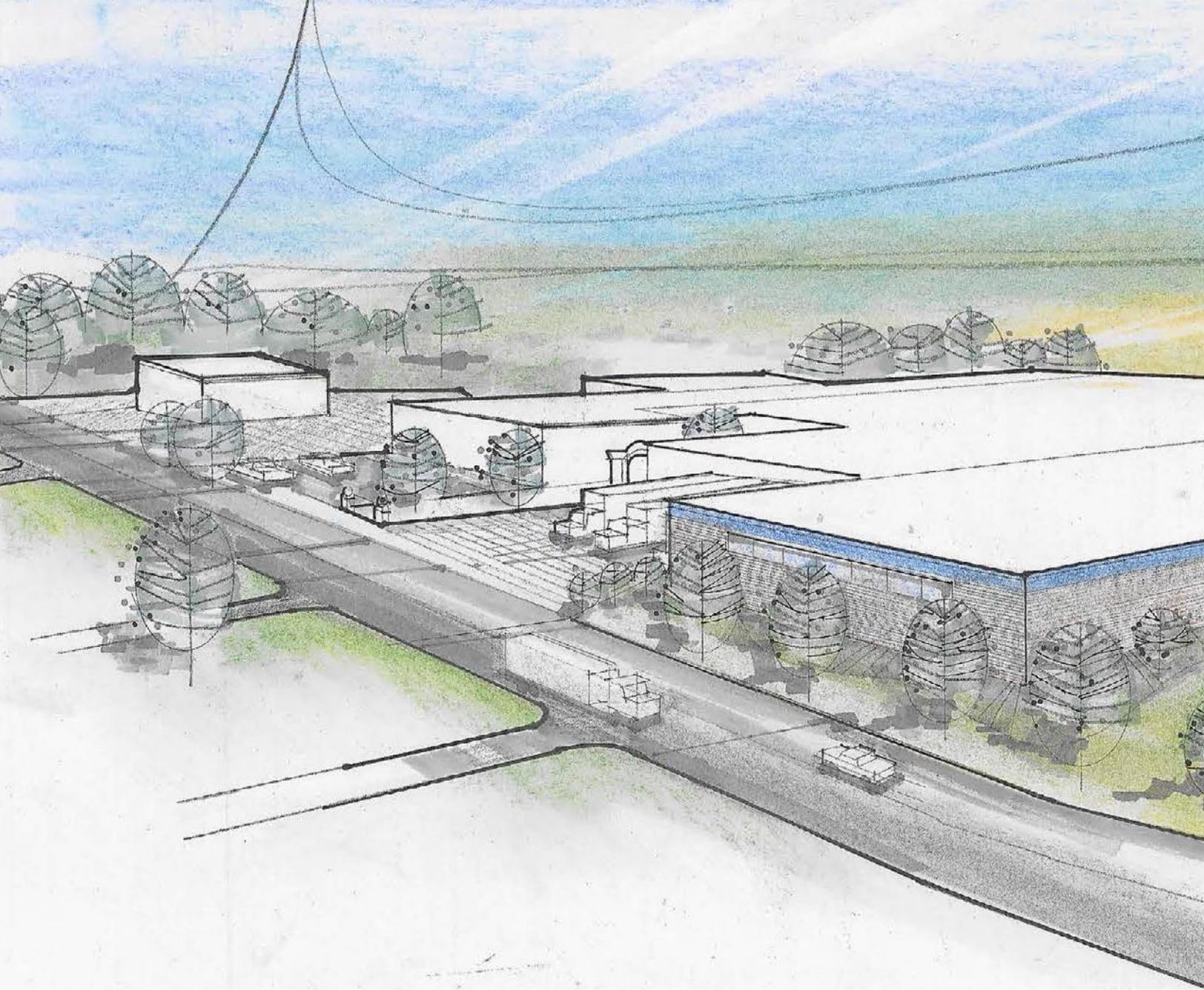


Production engineer and STI mentor Eric Hartz works with an apprentice in the shop.



In a combined effort with Bihler Germany, SUPERB Technical Institute has entered into an exchange program for their apprentices. Bihler and SUPERB exchange apprentices, allowing students the opportunity to learn at the other company.





FACILITIES

EXPANDING THE FUTURE

The future begins today, not tomorrow.

At SUPERB, the future is not an empty dream. Plans to expand SUPERB's footprint in the manufacturing industry have already been designed.



With scalable facility plans, the future is a visible reality.

Long-Term Plan

While some companies prepare for the now, SUPERB is dedicated to building for the future. With scalable facility plans, the future is a visible reality not just a mere dream.

SUPERB president John Miller says, "We understand the importance of having a vision for the future and

having a scalable facilities plan, which defines a road map to that vision."

SUPERB has already grown from a two car garage into a manufacturing complex, but there are bigger things ahead. With impending projects and more global manufacturing solutions to solve, the need is present.

The SUPERB facilities master plan is more than a mere architect's rendering. Expansion plans include doubling the production area, increasing the shipping and receiving area, and warehouse. In addition to more administrative offices, the complex will be surrounded with green space and a memorial park entrance to further enhance Innovation Plaza.

A scalable facilities plan for future growth demonstrates SUPERB's commitment to maintaining a strong hold on the global manufacturing arena that will continue to make the world a better place... one engineered component at a time.

OVERSIGHT

WHERE NO COUNSEL IS, THE PEOPLE FALL:
BUT IN THE MULTITUDE OF COUNSELLORS
THERE IS SAFETY (PROVERBS 11:14)

Giving Direction

The SUPERB ownership believes “in the multitude of counsel there is safety.” Therefore, a board of directors and professional advisors have been selected to ensure SUPERB’s future. Composed of family and non-family members, the board of directors and advisors make long-term and strategic decisions to ensure proper forethought and oversight.

SUPERB is a privately-held and family-owned and operated

company. The SUPERB owners know the importance of the board of directors’ strategic input to keep SUPERB focused and competitive. Coupled with the company’s continual success, some board members have been advising SUPERB for many years, thus proving the importance of their counsel and oversight. In contrast to the short term focus of many organizations, SUPERB’s directors and advisors are committed to ensuring organizational viability for future generations.



SUPERB INDUSTRIES BOARD OF DIRECTORS AND ADVISORS

JOHN MILLER, DIRECTOR AND CHAIRMAN (1986)

MATTHEW HINDEREGGER, PNC BANK (2009)

BOB TROYER, CPA (1992)

DAN MATTHEWS, CEO COACH (2007)

JEFF MEAD, CFO, TREASURER (2004)

GREG THOMAS, DIRECTOR (2002)

MATTHEW MULLEN, ESQ., DIRECTOR (2003)

DANIEL MILLER, VICE PRESIDENT, DIRECTOR (1997)

SUSAN MILLER, SECRETARY, DIRECTOR (1997).

SUCCESSION

STEPPING INTO THE FUTURE

10 Generations of Craftsmen

Christian "Schmidt" Miller
Blacksmith 1763 —1845

Jonathan C. Miller
Sawyer 1789 —1857

Christian J. Miller
Artisan Farmer 1822 —1900

Benedict C. Miller
Artisan Farmer 1848 —1913

Emanuel B. Miller
Blacksmith 1882 —1977

Daniel E. Miller
Clockmaker 1911 —1983

Jonathan D. Miller
Toolmaker 1938

John J. Miller
Mfg. Engineer 1961

Daniel J. Miller
Electrical Engineer 1982

Caleb Jonathan Miller
2012



Caleb in training.

The Miller commitment to craftsmanship began in America in 1763 with the birth of Christian "Schmidt" Miller.

Today in the 21st century the Millers continue to step into the future by embracing the latest technology and applying it to make the world a better place for customer and consumer alike. However, more important than the adoption of technology is the long-standing tradition to pass craftsmanship

from generation to generation.

John Miller learned carpentry from his grandfather and tool making and manufacturing from his father. Those skillsets have been passed to his son Daniel and enhanced with formal engineering degrees in manufacturing, electronics, and information systems. As we step into the future, the Miller family remains committed to this generational tradition, which spans more than two centuries.



Daniel Miller, Vice President of Operations in his workspace.





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