



2020

**TRIPLE BOTTOM LINE REPORT
CASCADE ENGINEERING
FAMILY OF COMPANIES**



INTRODUCTION

Triple Bottom Line Summary

Our purpose is to have a positive impact on society, the environment and to be financially successful. Our history shows that a business focused on People, Planet and Profit – rather than profit alone – is more innovative and sustainable. Our goals are to solve difficult problems with our stakeholders and strive toward operational excellence, so this philosophy continues to thrive. We do this work through diverse business units that make up our Family of Companies, aligned by our purpose, vision, strategic direction, culture, and values.

COVID-19 Impact

Our 16th annual TBL Report's theme is "resilience." This word has a strong association with surviving such a daunting year. As a company and a country we had to endure a challenging set of circumstances from the social unrest, adapting to living throughout a pandemic and maintaining a profitable business during financial obstacles.

It goes without saying the COVID-19 pandemic hit us hard. As a company we had to act accordingly and many difficult decisions were made. We survived this time and owe it to all the hard working individuals that pushed us through. We thank our employees and partners who made it happen through dedication and resilience.

GOALS AND ACCOUNTABILITY

Level Zero Goals: FY20

- PEOPLE:** • Be an Employer of Choice
 - Zero Injuries
- PLANET:** • Reduce Environmental FoC Footprint through Responsible Production and Consumption
 - Be a Leader in Sustainability and Customer Driven Innovation
- PROFIT:** • 14% EBITDA
 - Be *Organizationally* Excellent

Strategy Deployment

Strategy Deployment is the Cascade Enterprise System process that aligns our Triple Bottom Line Strategic goals and our actions over a 5 year timeline. The Executive Council and the Board of Directors develop our Level Zero Breakthrough Objectives with our guiding principles of True North. Then annual Level 1 goals are established by The Executive Council. From there all Directors and Managers can begin implementing solutions one by one.

By doing this, each department's and manufacturing facility's priorities and action plans are directly linked to the Cascade Engineering Family of Companies Strategic Breakthroughs, Initiatives and Functional Groups which allows faster movement, clearer communication and enhanced innovation.

Utilizing the Strategy Deployment process effectively keeps us accountable to ourselves and each other to hit our annual goals. By beginning with the end in mind, we can grow our business and strengthen all three elements of our Triple Bottom Line – People, Planet and Profit.

Safety First

We always highlight safety as a top priority. We have been under the national incident rate average for over a decade and we are continuing that trend today. We hold each other and our facilities accountable with our S.T.O.P. Observation Program. We encourage every employee to take action and record all potential safety concerns. Each entry is tracked through Cascade's S.T.O.P. DataPro to be solutionized. This vigilance leads us to prevent problems before they occur and maintain a culture constantly focused on safety.

A special congratulations to our CKT Mount Airy facility who reached two years without a single recordable incident or lost time accident!

Mission Room Enhancement

To further support our Strategic Deployment we are updating our Mission Rooms across the FoC. We are implementing new KPIs to help identify opportunities for improvement and adding an Accountability Board that tracks daily actions per department allowing a clear and rapid pathway for obstacles to overcome or problems to solve.

This operation is an integral part of the Cascade Enterprise System and will help our company have a consistent process to manage plant improvements, priorities and performance.

Routsis Technical Training

For more than 30 years, Routsis has delivered top-quality training to plastics manufacturing facilities, educational institutions, and individuals worldwide.

This new training tool will help our ongoing effort to improve technical talent and support our practice of optimal control of the injection molding process, with focus on continuous improvement and problem solving. This training tool is designed to give all technical employees access to learn, improve, and refresh their technical skills.

New PLM System: Teamcenter

The FoC has made a significant investment to provide a new tool in Siemens Teamcenter that will help transform how we work together. Teamcenter is a PLM (Product Lifecycle Management) which will give us the ability to manage changes around product, tooling and documentation in one location. This will cover the entire lifecycle of the products we produce to support customer collaboration, technical and financial decision making and change execution.

Business Principles

Cascade Engineering Family of Companies has always had a strong foundation of vision, purpose and values. We also strive to be the best manufacturer and supplier in the modern day. The executive team have developed three major objectives that will ensure the continued success and future longevity for the entire Family of Companies.

Customer Driven Innovation: We create customer intimacy by building competitive differentiation, rapid invention and flawless launch.

Employer of Choice: Our goal is to have the safest and healthiest workforce in the world. We provide learning and development building a strong culture full of engaged employees.

Operational Excellence: Our lean manufacturing systems, along with plant wide 6S allow smooth production as well as process and machine excellence.

AN ANTI-RACISM COMPANY

Cascade Engineering has been through a long journey to become an anti-racism company, which was official in 2006. During the social unrest of 2020 we made sure to reiterate our anti-racism statement often and ensure our entire workforce felt included, valued and heard.

The term “anti-racist” has long been used by activists and academics to mean that a person or organization doesn’t solely condemn racism, they actively fight it.

The movement set off by the death of George Floyd has prompted companies from Netflix to Walmart to promise changes and pledge millions toward racial equity. A handful of businesses, such as Peloton Interactive, have paired their actions with another goal: declaring their companies will be anti-racist.

The events spanning 2020 caused us all to reflect on where we are as citizens with regard to racial injustice. The subsequent protests and violence were evidence of the deep distrust and frustration of many throughout our country. Cascade Engineering has been on record for decades as opposed to racist behavior and has attempted to institutionalize anti-racism in our culture. We believe deeply in the values of Diversity, Inclusion and Equity.

As an Anti-Racism company we will identify and discuss issues of race that impact both our company and the communities where we work and live. As leaders of this company we condemn the death of George Floyd and recognize that racial injustices no matter where they occur impact people both near and far. George Floyd’s death reminds us that the American Dream is not the same for all citizens, and people of color face disparities in the judicial system, education, employment, housing, banking, health outcomes and most of the opportunities that make this country great. As long as race is one of the single biggest factors that determines one’s mobility, the fabric of our society will continue to deteriorate.

Our company recognized Juneteenth, which is an American holiday commemorating June 19, 1865, when Union general Gordon Granger read federal orders in Galveston, Texas, that all previously enslaved people in Texas were free. We also participated in the ‘Nine Minutes of Silent Reflection’ at 12:09 on June 9th as we stood together against racism. We will continue do our part and advocate for racial equality.



Diversity Calendar

Since 2008 our Communications Department has designed, produced and distributed a calendar every year to all of our employees. It is called the Diversity Calendar. Each year we select a theme which has taken many forms such as diversity in cultures, rituals, landscapes, bridges, etc. For the 2021 Diversity Calendar we focused on the most controversial topic yet in response to the year we just experienced. The theme was “Lift Every Voice” as it looks at the present day and through history, sharing stories of people and communities who have raised their voices to demand justice and equal treatment under the law. We hope to shed some light on other historical struggles that spawned positive change. Let’s hope we can find the same resolution through our current struggle.



Diversity Theater

We host a live theater for our employees which actors play out real scenarios covering issues of race, gender equality, sexual orientation and others. After each scene, audience participants then dialogue to learn and understand how each of us are impacted in situations like these. The trick here is the scenes portrayed are real occurrences experienced throughout our Family of Companies. It’s an awakening of sorts to connect matters of disrespect and inequality with the real world. The purpose of this is to bring awareness that these scenarios happen, and they happen all around us. We at the Cascade Engineering Family of Companies believe all people should be treated with dignity and respect. We ask that you join us in our journey to celebrate diversity, practice inclusion, breakdown unjustified inequities and be an anti-racism organization.

Grow 1000

Cascade Engineering helped convene a local group to address systemic racism in our community. One issue brought up was a lack of opportunities for summer employment for youth of color in the Grand Rapids community. From that conversation, Grow1000 was born. Grand Rapids City Manager, Mark Washington, challenged employers to hire 1,000 youth for six weeks in the summer of 2020.

We signed up for 10 hires who worked as partners and the money was supplied by Fred Keller’s donor advised fund at the community foundation. This was a very exciting program in our work to address systemic racism right here in Grand Rapids.



Returning Citizens

We believe in second chances. That’s why we give former inmates an opportunity they may otherwise never get. Michigan as a whole has done an incredible job bringing down our recidivism rates with over 500 companies following this initiative. Cascade Engineering was recently showcased on BBC’s “People Fixing the World” podcast, with Kenyatta Brame highlighting our efforts in this area. Listen to the episode here <https://www.bbc.co.uk/programmes/p08ymfb7>

PEOPLE



CHRISTINA KELLER



Christina Keller was chosen as one of the 50 most influential women in West Michigan and was also a CEO Spotlight on the Corp Magazine Podcast. The Conscious Investor Publication even wrote an article about Christina and our company's focus charting a new course in Manufacturing by reducing waste, empowering communities and fighting against recidivism. As our President and CEO, Christina has made considerable strides in corporate responsibility and leadership.

She is on the board for Cascade Engineering, Paragon Tool & Die and Independent Bank where she leads initiatives toward 'impact investing' in socially responsible companies. Christina is also a Trustee for the Grand Rapids Community Foundation providing helpful direction for the Foundation's 'One Hundred New Philanthropists Project,' engaging in the next generation of donors.

Christina has been making decisions about sustainability and economic stability that will impact our state in years to come.

FRED KELLER



Fred Keller was a MSW Legacy Award Winner in 2020. MSW (Municipal Solid Waste) Management Magazine commemorated their 30 year anniversary with honoring 30 waste management professionals who have made significant contributions to the advancement of the industry.

They want to also thank all those men and women with the dedication and humility to continue finding solutions, who are innovating for a new generation and moving forward with the mission to protect human health and the environment. The efforts of us all is what will allow further progress.

"It has been our honor to serve the Municipal Solid Waste market with innovative cart and systems solutions for over 30 years. Providing high-quality products with the best service and dependability has been our team's goal from the start. Thank you for this recognition!"

~Fred Keller

FOC EMPLOYEES: ELECTED POSITIONS

There are many examples of our employees volunteering, getting involved in their communities and giving back in any way they can. But did you know that within our Family of Companies there are a few employees with elected positions? We would like to highlight these individuals who have taken that level of dedication and responsibility to a higher level.

STEVE YAGELSKI

Steve Yagelski has been with CKT for 15 years and is currently the FoC's Supplier Quality Manager. Steve is responsible for overseeing the quality performance of each supplier. He also has been mayor of Montpelier for almost 20 years! Steve has been a member of the Montpelier town council for 4 years and volunteers as a baseball coach, softball coach and serves on the Montpelier Fire Department.

Steve's personal motto is *"never look back on yesterday, always look to tomorrow, as tomorrow will soon be yesterday."*

Steve has lived in Montpelier, Ohio his entire life. His family members are his role models, as they all felt it was important to give back to their community. This passion for improving his community can be seen through recent completed projects such as a new dedicated solar energy field, derelict building demolition to be turned into green spaces, reclamation for portions of the Southwest Subdivision Street and continued work on the CSO project in one section of town.

Despite the challenges 2020 brought to the community, the village employees and community members came together on a large project, the Iron Horse Trail that takes you along the river. Every Saturday was an open workday for all ages to achieve three overall goals: Visit local seniors to clean up their yards and minor house repairs, paint and clean a few store fronts downtown, and start clearing the planned trail. Steve stated, "It was wonderful to see that even thru the pandemic, people came together and had a great time." The incredible progress has inspired another improvement to the Cannonball Trail. The ultimate goal is to tie other hiking trails and bike routes from outside the county together to better connect Montpelier with surrounding areas.

Steve says, *"we are looking forward to getting back to what will now be known as a new normal where our youth can enjoy what our parks have to offer. Swimming, baseball, softball, t-ball, Bean Days and especially the Ole Town Country Gatherings. This type of activity is wonderful for youth of all ages, but it is also a time where friends and families can get together in the open space and reflect on life in general."*

SHARON DARBY

Sharon Darby is the Director of Environmental Safety and Sustainability. Her efforts in these areas have been crucial keeping safety a high priority with the Family of Companies. She lives in Saranac, Michigan about 30 miles east of Grand Rapids.

In 2010 Sharon was elected as the Trustee, President and Mayor of the Village of Saranac, which includes Chair of the Fire Department Board. Sharon's 20 years of experience in all aspects of Human Resources has been invaluable when navigating state requirements for the Saranac community. She has lead many improvements including street and bridge repairs, new storm and water systems, re-using of vacant buildings, land donation for Scheid Park and Parks & Recreation plans. Her experience in safety and sustainability has been vital in COVID-19 response, proactive PFAS testing, smart water meter conversions and applying for Fire Fighter hazard pay grant.

She is hopeful that her services as Trustee and President/Mayor of the Saranac Village strengthens the Village making it a great place to call home.

KENYATTA BRAME

Kenyatta Brame is the Executive Vice President and Chief Administrative Officer of Cascade Engineering Family of Companies. In 2016 Kenyatta began his service as an elected Trustee with the Grand Rapids Community College (GRCC) which is a state-of-the-art learning institution. The college provides relevant educational opportunities that are responsive to the needs of the community and inspires students to meet economic, social and environmental challenges.

As a member of the Board of Trustees for Grand Rapids Community College, Kenyatta's leadership provides vision into defining the needs of students and faculty, the cost involved and implementing any policies required, all while taking into consideration the community impact of the decisions being made and how those decisions reflect GRCC. Kenyatta stated that he is *"extremely happy to serve as an elected Trustee for the Grand Rapids Community College. No matter what your background, the college can help you grow both professionally and academically. I enjoy being a part of an organization that does so much good for so many people."*



TALENT DEVELOPMENT DEPARTMENT

To ensure all employees get the most out of their employment we have an entire department dedicated to that purpose.

Here's a little historical background on the Department. Originally it was known as the Human Resource Development Department and that name was changed in 2007 to the Talent Management Department. Upon reflecting on the fact that you manage things and you develop people it was changed again a few years ago, to the Talent Development Department or TDD for short.

The staff of the Talent Development Department (TDD) offers many developmental programs for employees, from seminars and workshops, to college courses and career counseling sessions. They can assist employees in identifying a career that fits their interests. They can provide assessments for personal and professional development and they can help you put a personal development plan in place.

The Talent Development Department is a company wide support staff, so regardless of where a TDD team member happens to sit, they are a resource across the Family of Companies.

Dave Barrett
Director of TDD



Val Dewey
TDD HR Manager



Melissa Cronin
Training Coordinator



Peg Olds
Senior HR Manager



DENNIS LEMMON

**Project Leader for CK Technologies
Montpelier, Ohio**

Congratulations to Dennis Lemmon who was elected into the SPE (Society of Petroleum Engineers) Thermoforming Board. Elections for the board of directors began January 24th 2020 and were announced February 22nd.

The SPE Thermoform board's mission is to facilitate the advancement of thermoforming technologies through education, application, promotion and research. This professional society is highly active in the current climate of change and volatility in the plastics industry.

On top of being on the SPE Thermoforming Board, Dennis is also involved in the 2021 SPE Thermoform Conference to be held in Grand Rapids. He will also be a participating member of the SPE Research and Development Committee. He recently voted for the board to co-sponsor with Vantage Plastics, a leading company in Thermoforming.



LISA MARIE BARKEL

**Execute Assitant for Cascade Engineering
Grand Rapids, Michigan**

The Employee Campaign Coordinator Award (ECC) was given out to Lisa Marie for going above and beyond in the work of running a United Way campaign at their workplace. Lisa Marie put a lot of time and effort to coordinate a successful campaign for Cascade Engineering. In 2020 She opened the door to a national campaign and introduced year round activities.

The entire staff at Heart of West Michigan United Way thanks her for all her help and support with their mission to make a difference for thousands in our community.



CK TECHNOLOGIES

Grand Prairie

Grand Prairie's employee break room was repainted with "The FoC Logo Mural." This project was designed and presented by Tommie Alexander, the 1st shift production supervisor and the Grand Prairie CES facilitator.

"In efforts to visually improve the GP facility, the team and I decided to completely do a break room makeover. During the paint process, I thought it would be cool to have words of inspiration, along with words representing what the Family of Companies stands for, and believe in placed inside the break room in large artistic fashion."

~Tommie

The FoC Mural serves as a morale booster, and showcases the teams creative and innovative side. This art wall has become a backdrop when photos are taken during Star Awards announcements, group photos, and for monthly meetings.



Brownsville

The Brownsville's facility is nearing a decade of production in the heavy truck and bus industry, but they have also made an incredible impact for the communities around them.

Brownsville City Commissioner John Cowen Jr. praised Cascade Engineering Family of Companies for investing in Brownsville, and read a proclamation on behalf of the commission recognizing CKT for the hundreds of jobs it has created in Brownsville as well as its partnership with Brownsville Independent School District's P-TECH (Pathways in Technology Early College High School) program. Cowen said "the partnership expanded employment opportunities for students while promoting CKT. He hopes the city's residents recognize the contributions manufacturing makes to the local economy."

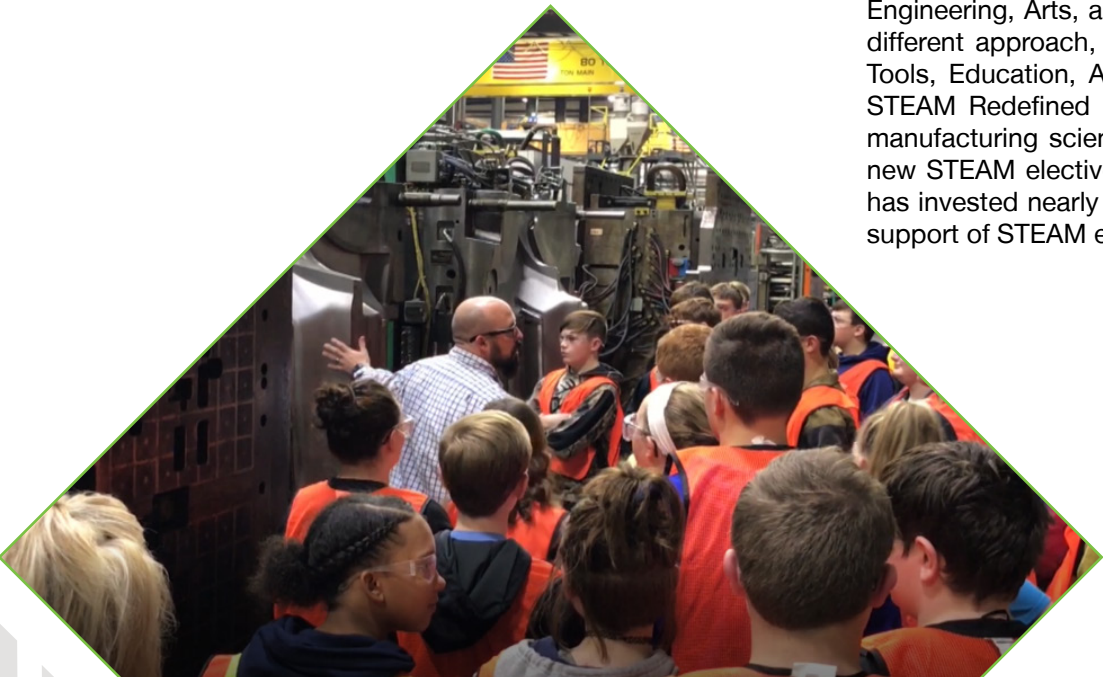
We are proud of the work Brownsville has done and continues to do to drive towards our top objectives of being an employer of choice in the region as well as driving towards Operational Excellence.



Mount Airy

Every year we hold a campaign to raise money for The United Way. This year was a little different and we were very impressed with the turnout. The advancement of digital donation forms, and the ability to now choose where you want your donation to go increased activity. We rolled this campaign across the entire Family of Companies with awareness, events, t-shirt sales and our very successful silent auction, which many employees were able to win incredible prizes while doing good in their community.

We really want to spotlight Mount Airy, for their dedicated efforts. They had 100% participation and raised over \$2,000! This was their first United Way Campaign, but they have been previously participating in a local United Fund Campaign for several years, receiving 2 "Outstanding Giving Increase Awards" for their companies generosity.

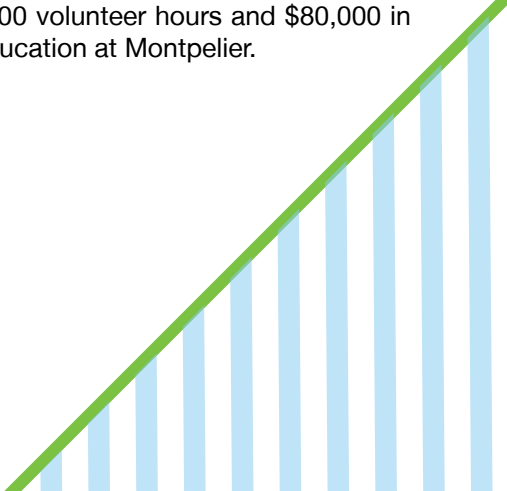


Montpelier

Montpelier has always taken an active role in supporting our local communities. One area of focus is fostering a relationship with the local schools in order to develop our future workforce. Activities include teaching business concepts through Junior Achievement, developing interview and job readiness skills, mentoring a robotics club, and plant tours for local schools.

Greg Lee, Manufacturing Engineer, has a passion for bringing manufacturing, technology, and skilled trades to local youth. Greg speaks at multiple local schools and has been a part of the STEAM advisory boards for Montpelier, Pioneer, Four County Career Center, and NWOCA (Northwest Ohio Computer Association).

Thanks to the involvement of the STEAM Advisory Board and community support, Montpelier Local Schools is in its first year of its STEAM Redefined program. Traditional STEAM programs focus on Science, Technology, Engineering, Arts, and Math. STEAM Redefined takes a different approach, by transitioning the focus to Skills, Tools, Education, Application, and Manufacturing. The STEAM Redefined program includes the addition of a manufacturing sciences lab, additional instructors, and new STEAM electives for grades 7-12. CKT Montpelier has invested nearly 600 volunteer hours and \$80,000 in support of STEAM education at Montpelier.





Home ownership is part of the American Dream. In addition to the financial benefits of home ownership, there are also positive societal outcomes associated with owning a home including stability, pride and community involvement.

In partnership with The Source, we created the Cascade Home Ownership Program - also known as CHOP - to help our employees buy their first home in the communities where we live and work..



Full-time FoC employees with at least one year of service at the time of application are eligible for a zero interest forgivable loan, which is a loan that does not require repayment if certain criteria are met, for the purchase of their first home. This forgivable loan can be applied toward the down payment, closing costs or other fees associated with the purchase of the home.

Home ownership in and of itself will not solve all of our social ills, but it may help create environments that allow people to invest in themselves and build wealth to be passed on to future generations.



BALANCE 360
PHYSICAL. EMOTIONAL. FINANCIAL.

Balance 360 is the integrated FoC wellness program that takes a 360 degree approach to health and wellness by focusing on physical, emotional, and financial health.

In 2019 we built the foundation for balanced health, which we did by focusing on employee education. In 2020 we focused on expanding all of our knowledge with a theme of "The More You Know."

Our greatest addition was introducing Quizzify which uses trivia games and tutorials to teach us all how we can take better care of ourselves, stay away from unnecessary medical care and save money. To make it even better, if you answer all the multiple-choice questions you earn \$12 per week!

We look forward to bringing new innovative ways to bring balanced health to our employees, families and friends.



WISER EMPLOYEES
MAKE HEALTHIER DECISIONS

PLANET





Brief History

At Cascade Cart Solutions we have been working on a new program to decrease our ecological footprint. We first nicknamed the project EUCHR, which stands for 'expanded utilization of curbside household recyclables.'

We have engaged our customers that pick-up the material curbside, the processors that clean and pelletize the plastic, our CFI engineers, and Operations team, to develop a process that consumes the material into our systems and gets processed into carts. We cracked the code which led us to our new product line called the EcoCart, which includes 10% of true household curbside recycled plastic.

About the EcoCart

We took action and have created the world's first cart made from post consumer recycled material (PCR). As previously stated the EcoCart is manufactured with 10% plastic right off the curb.

The cart is also part of the Association of Plastic Recyclers' Demand Champions Program. This initiative is asking participating members to raise the amount of recycled plastic they use in certain products year by year. Our goal is to increase that 10% over time while keeping our standards in durability and longevity.

"I am confident we will get there in the next year or so"
~JoAnne Perkins
Vice President of Environmental Systems and Services
Cascade Cart Solutions



ELECTRIC VEHICLE MARKET

Vehicles

Electric vehicle (EV) manufacturing has certainly developed into an exciting and rapidly growing part of today's automotive industry.

Start-up manufacturer Rivian Automotive is dedicated to “exploring the world” with sustainable electric vehicles. Rivian refers to these 100% emission-free vehicles as EAVs – Electric Adventure Vehicles. In a nut shell, Rivian Automotive is turning the EV market upside down and Cascade Engineering Automotive Americas is one of only a few long term strategic supply partners with them here in North America.

Cascade Engineering has been awarded contracts to supply engineering services, exterior body panels using in-mold film technology, interior plastic assemblies as well as some very large injection molded and painted assemblies. Cascade is currently working on the Rivian R1T – truck, the Rivian R1S – SUV and the all new Rivian/Amazon electric delivery van.

We have also aligned with other EV brands such as Karma, Faraday and Zoox.



Sustainability is at the core of who we are at Cascade Engineering. Along with our operational excellence and customer driven innovation, aligning our manufacturing and engineering expertise with sustainable vehicle manufacturers will be a successful venture.

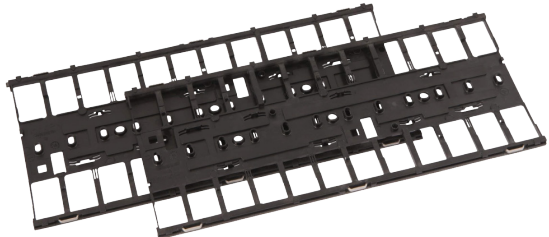


Parts

We have found ourselves leading in the Electric Vehicle market with our work on battery cases, fluid connectors and front trunks with both the old players (Ford, GM) and the new players (Karma, Zoox, Faraday, Rivian).

A key part of our automotive strategy has been to build off of the outstanding work from our partners in Hungary, Cascade Engineering Europe (CEE). Zsolt Szincsak and his team have built a successful model for the growing fluid connector business with the automotive OEMs throughout Europe.

We are pleased to announce that we are in receipt of our first Letter of Intent from Akwel Automotive for 14 tools for our very first fluid connector award. This establishes CE as the innovator in this automotive space as the first manufacturer of fluid connectors in the United States. With this award we will continue to move forward in this market space with other consumers of these products.



PROFIT



CASCADE CART SOLUTIONS

Engel Press

It was a long wait but the Engle 4400 ton plastic injection mold machine is operational in the Buursma Plant in Grand Rapids.

As a team, we chose to look closely at new machine suppliers and went through a rigorous quoting process. From there, we then used a KT (Kepner-Tregoe) decision analysis technique to guide us into the best decision for the business and future in cart manufacturing.

The press was deemed production ready late July, one week ahead of our planned start date.

Initial runs from this press were very encouraging. There were no big surprises or delays and the press ran extremely smoothly and quietly. There were no issues with secondary equipment installation.

The one year journey paid off in the form of reduced cycle time and other planned improvements. This will be a very good investment for the company and employees for years to come.

Following the success of the Engel Press, we will be assessing further presses nearing their end of life to be replaced.



ENGEL



Pink Cart

As you all know the Pink Cart has been a very successful and recognizable product. After a 10 year journey the Pink Cart has hit an outstanding donation level of \$750,000 to the American Cancer Association. We are thrilled to have made such a significant impact and were able to contribute to cancer research. Our next milestone is clearly to surpass one million dollars in donation totals.

Another very special thank you to all team members who have produced, sold and marketed the Pink Cart.

NOBLE POLYMERS

Hemp-Filled Product Line

In 2019, Noble Polymers entered into a partnership with The Hemp Plastics Company to create a new line of hemp filled bio-based plastics. Noble has since been developing products within four targeted resin systems: PLA, PE, PP, and ABS. Each of these base polymers is filled with 20-33% coarse hemp powder, which is a byproduct from the extraction process where hemp is used to make products for the health food industry.

Developing the processes for producing these materials presented many challenges for the Noble team due primarily to the moisture content of the hemp powder. The team worked together to troubleshoot and solve any issues and setbacks as they arose.

Noble produced large scale sample quantities for each of the four core products that were used to seed the market with samples and trials towards commercialization. The development of these processes strengthened the partnership between Noble Polymers and The Hemp Plastics Company and opened new doors for Noble into the growing market of bio-based plastics.



Products

Here are two developments by The Hemp Plastics Company using Noble Polymers pellets.



A single-unit drink cooler by Recoil made with Noble's Hemp-Propylene. This 25% hemp filled Polypropylene cooler features a spring-actuated loading mechanism that adjusts to fit beverages of all shapes and sizes.



A mid-size travel cooler made entirely of Noble's 25% filled Hemp-Propylene. Made by Taiga Coolers, this unit will compete directly with both YETI and RTIC. The speckled, hemp-filled surface gives the cooler an earthy look as well as a Green Initiative story!

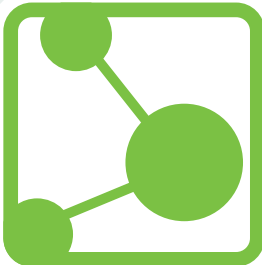
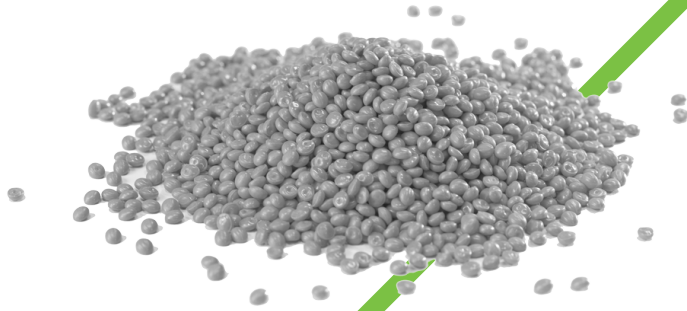
These developments are the first of many products to launch as a result of our partnership with The Hemp Plastic Company. We look forward to watching this relationship grow.

P3 Bumper Material

Noble's material, Regis 6304 Silhouette Gray, was approved by Daimler for use in the P3 Bumpers that have been produced at the West Plant in Grand Rapids.

This represents a milestone for Noble Polymers, as it was the first Noble material to be approved to a Class 8 Bumper program. This was also the first of several projects aimed at cost savings and margin improvement by converting external material margin to FoC margin through Noble Polymers.

Noble and CKT teams came together and worked very hard on this project. This highlights the synergies that can exist across the Cascade Engineering Family of Companies!



CK TECHNOLOGIES

DeBotech

Debotech is a Mount Airy customer, providing carbon fiber and advanced composite products. Mount Airy started collaborating with Debotech to paint carbon fiber parts for the GM Corvette C7 ZR1 in August 2017. The first parts were fender vents and quarter vents which were molded by Debotech.

The CKT team's great work paved the way for further collaboration on the newest Corvette known as the ZERV Stingray. It is the first Mid-Engine Chevy Corvette which launched this year. CKT Mount Airy is responsible for three parts: splitters, rockers and grille inserts.

With DeBotech becoming a large customer, we completed an efficient Quality Inspection area for their parts. This new inspection area was created per GM guidelines. Special light enables us to see any paint defect more clearly compared to normal fluorescent light. This area allows us to inspect the larger parts for the DeBotech program and prepares us for any advanced inspections in the future.



Continuous Improvement Event in Grand Prairie

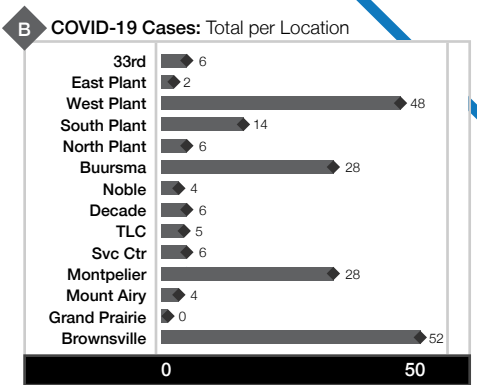
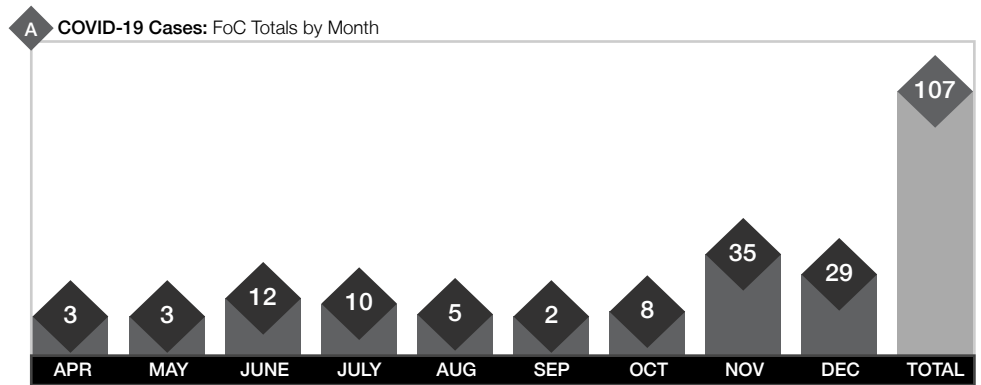
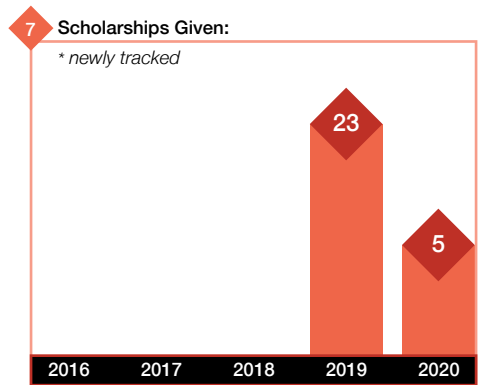
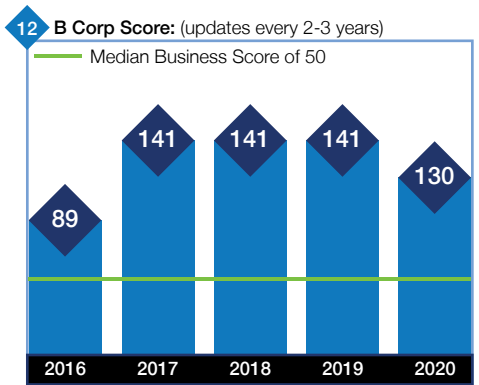
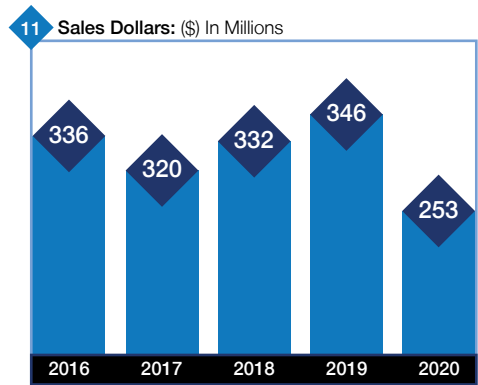
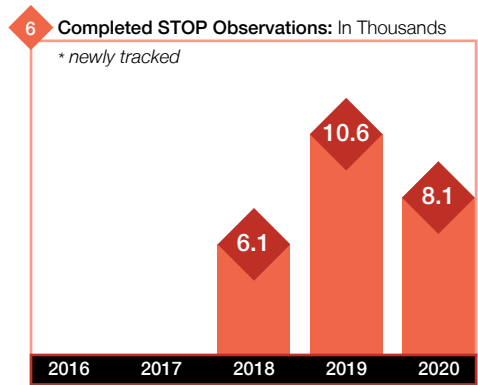
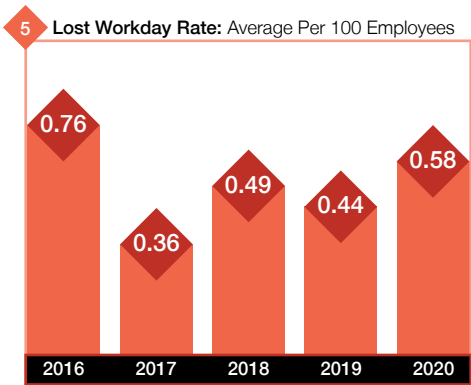
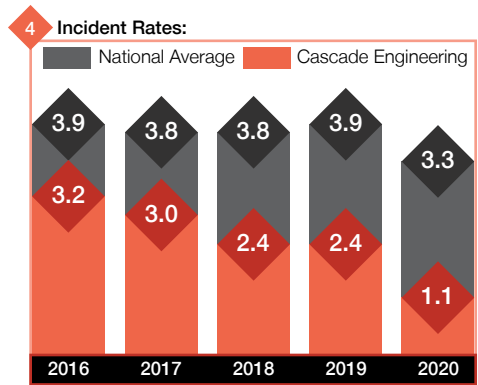
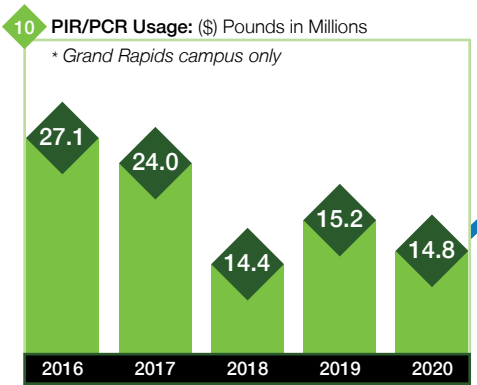
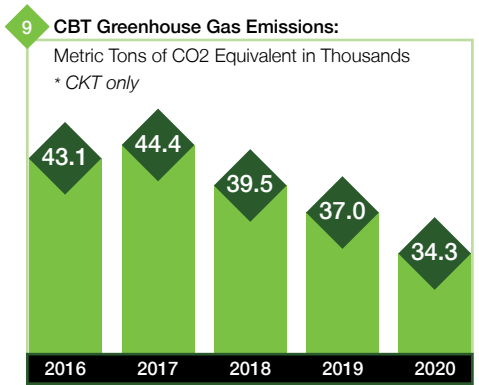
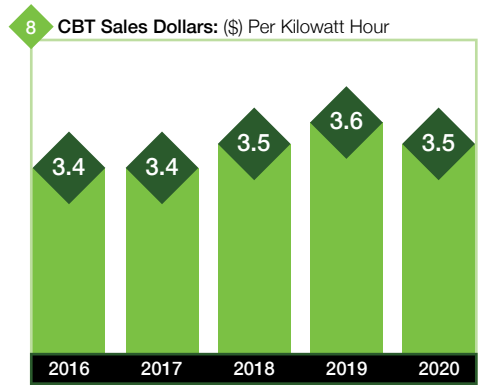
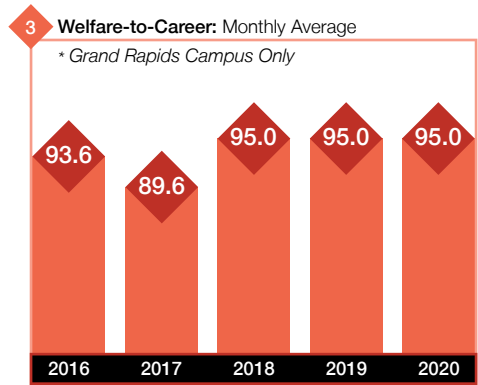
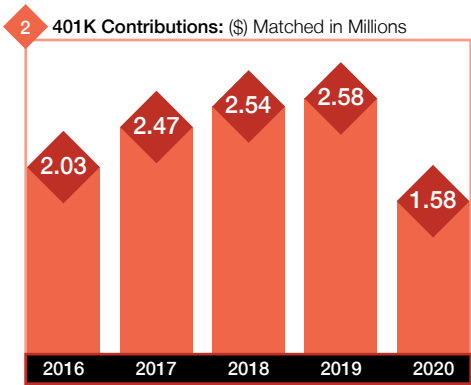
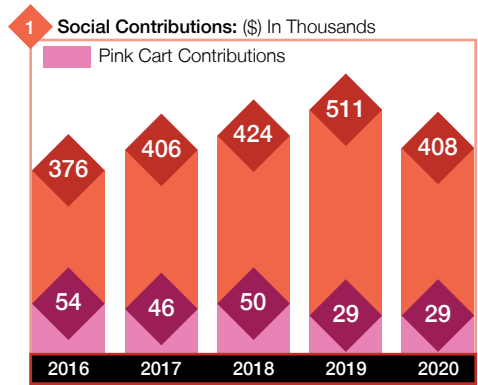
With an effort to improve quality and efficiency, Grand Prairie has found a solution. Using racks on wheels and rotating through a circuit once the rack is full has made many advantages.

The old plant layout was creating excessive travel time and material handling. Material handling contributes to 37% of the defects in final inspection. These rejects are created when a product is handled and placed on racks. Wrong position or incorrect rack represents 5% of the final inspection rejects. We eliminate 43% of final inspection rejection by having racks moved to production lines. This has ncreased 27.8 % production line efficiency by eliminating the 358 ft. distance travel to load product to racks and return to workstation.



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