



# 2020

## SUSTAINABILITY DEVELOPMENT REPORT









*Defining - Managing - Measuring and Acting on  
Today's Sustainability Goals.*





**“We are very proud to publish our 6th Sustainability Development Report. This report reflects our ongoing commitment to sustainability in manufacturing operations and product development, as well as our efforts to support our HR development program that contributes to the well-being of COBRA’s most important asset - our people.”**

*Danu Chotikapanich, CEO*

## INTRODUCTION

Well over a decade ago, COBRA made the decision to make sustainability a key focus for its business. From the initial Code of Conduct launched in 2007, COBRA continues to work towards becoming an industry leader in sustainable composites manufacturing.

The aim is to have a positive impact on its people and the planet whilst building world class composite products for our customers.

This report is published annually, providing COBRA’s customers and suppliers with an insight into the company’s sustainable business strategy, and detailing what sustainability means to COBRA now, as well as what to expect in the future.

This report also acts as an internal benchmark, ensuring that COBRA, as a unified group, is accountable for its actions, enabling the company to better quantify impact, understand process and make measurable improvements.





## **Sustainable**

“capable of being maintained at length without interruption or weakening”

“a method of harvesting or using a resource so that the resource is not depleted or permanently damaged.”

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## **COBRA BECOMES COBRA 'INTERNATIONAL'**

When Vorapant Chotikapanich originally opened the doors of his factory in 1978, the objective was to build quality composite windsurf boards for the local markets in Southeast Asia. The Thai people's affinity for artisan workmanship quickly put the COBRA factory on the world map with international brands soon asking the company to build their boards as well.

Today, with 2,500 staff, and customers from around the globe, COBRA has become a truly international business. Now lead by sons Danu and Danai Chotikapanich (CEO and CFO) COBRA is, at its core, still a family business and the connection to the local community in Thailand remains as strong as 40 years ago.

COBRA has developed its business as Thailand has evolved politically, economically and socially. Home to one of the strongest democratic systems in Southeast Asia, with strong human rights and labor laws, Thailand ensures safe working conditions in all factories and local suppliers.

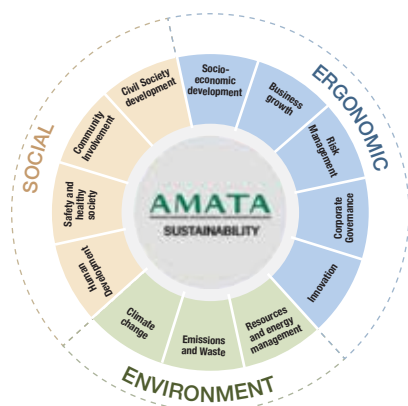
Thailand has also placed an increased focus on its environmental policy. Realizing the immense value in its unique coastal and tropical landscapes, the Thai population is moving quickly to protect these natural resources within its developing economy. Situated within the sustainability focused Amata City Chonburi Industrial Estate, COBRA hopes to be able to do its part to grow and develop within our community for generations to come.





## AMATA NAKORN INDUSTRIAL ESTATE

In year 2000 COBRA relocated its operations to Amata City Chonburi Industrial Estate, which today is at the heart of the Eastern Economic Corridor of Thailand. Whilst Amata City offered the required space for the company's significant growth, another key benefit was its strong emphasis on sustainability and support for the surrounding community. Amata City Chonburi Estate encourages development whilst also ensuring that the surrounding community is able to benefit socially and economically from the development. Noise, dust, waste and water quality are also carefully monitored across the estate, with every business or factory accountable for their emissions and impact on the environment.



"AMATA Sustainability Framework" used as a guideline for company's operation maintains a balance of quality living between the industry and society on the basis of social and environmental responsibility.

# SUSTAINABILITY

## Through People



*Outstanding Performance and Long Service Year Awards of 2020*





## **“Our people are the most integral part of bringing our proucts to life”**

Composite manufacturing is a hands-on business. Whether you are delivering large scale production volumes or creating smaller volume bespoke products, a high degree of artisanal craftsmanship and input from the human hand is required. COBRA’s reputation for delivering strong, light and beautiful composites to the most discerning customers around the world is built on its talented staff’s ability to mould, craft and finish products to exceptionally high standards. Deservedly proud of its people, COBRA is focused on ensuring it continues to provide a safe, healthy, and happy workplace.



*Part of connecting with our community staff at Cobra take part in annual Buddhist celebrations*



## HEALTH AND WELLBEING

COBRA is also committed to providing a healthy workplace for our staff. COBRA offers staff regular access to medical support both through on site nursing staff also via our partnership with Vibharam Hospital on the AMATA Estate. This, coupled with an annual full physical exam for every staff member, provides opportunity for staff to address any health concerns whether personal medical issues or work-related issues such as back or joint pain. Work related health issues like ergonomics or strain injuries can then also be quickly addressed on the production lines.

In 2020 we continued to develop our onsite produce gardens which help to supply fresh fruit and vegetables to our staff canteens. We have more than 10 canteen stalls on site offering a variety of traditional Thai meals for staff from soups to stir-fry dishes and salads.







*For the love of sport. Cobra staff make the most of lunchbreak and regular sports days playing soccer and Sepak takraw on the Cobra Factory courts.*

Cultural, social and sports events are also a core part of COBRA's approach to both mental and physical wellbeing. Like so many businesses around the world, Covid had a significant impact on live events in 2020 but it was still possible to run a number of fun events to give our staff a chance to socialize, energize and blow off a little steam.

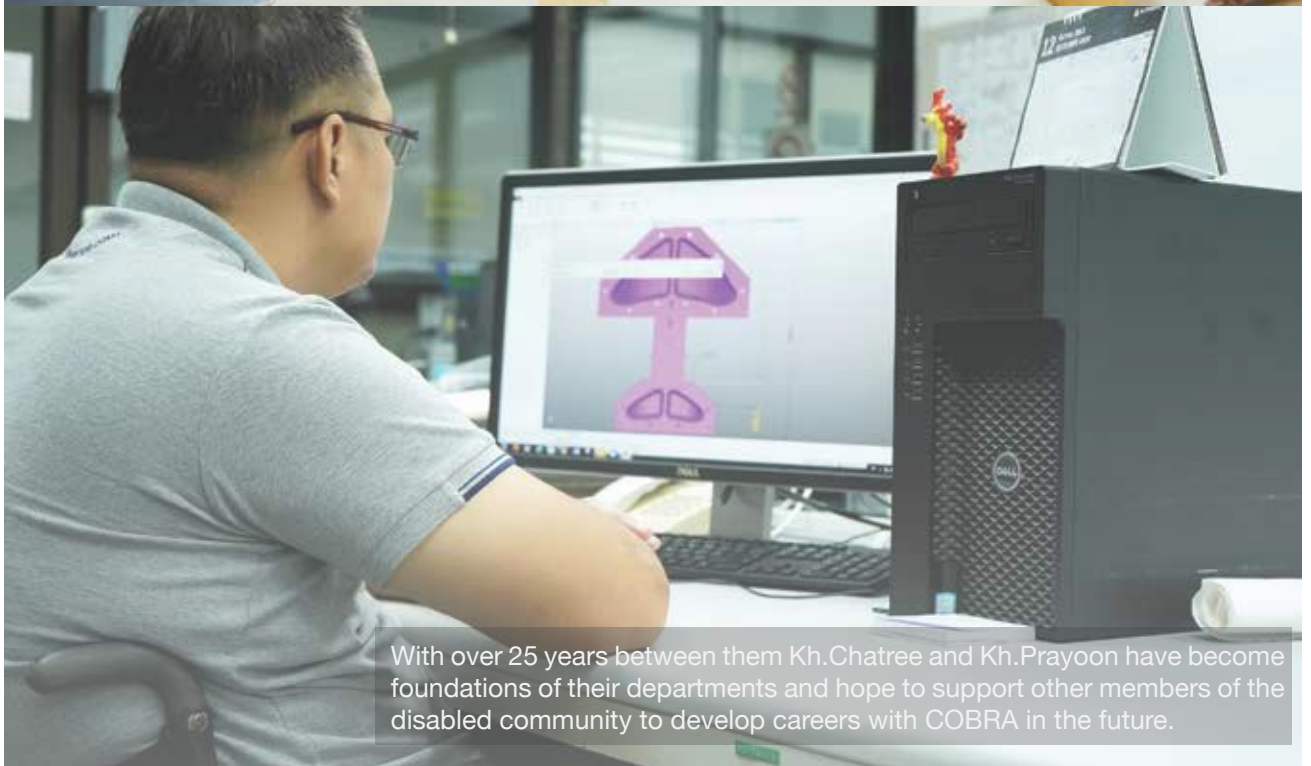


COBRA team volunteering to help build water management systems for the local wilderness areas.



## INCLUSIVITY

COBRA values an open and inclusive workplace, welcoming staff of all backgrounds, nationalities and religions. Well over 5% of the Thai population identifies as LGBT although there are still issues of discrimination across society COBRA ensures an equal opportunity hiring policy is in place and has a number of LGBT staff. We are also very proud to have created more than 20 permanent positions for staff with disabilities so far, who now work throughout the business in varied roles from warehousing to engineering and HR. COBRA is committed to continue to develop similar career opportunities for new disabled staff in the future.



With over 25 years between them Kh.Chatree and Kh.Prayoon have become foundations of their departments and hope to support other members of the disabled community to develop careers with COBRA in the future.





## **SALARY AND REMUNERATION**

The most integral part of bringing our products to life are the people driving our manufacturing process.

Clearly reflecting the value COBRA places on this skilled labor, COBRA's minimum wage exceeds Thailand's minimum wage by over 40%. This, combined with monthly incentive programs, allows the majority of our staff to regularly earn well above the Asia Floor Wage for Thailand within normal working hours. Over the coming years, COBRA plans to continue to develop its salary policies, working towards a healthy living wage for all staff, a key fundamental of a happy, motivated workforce.

# SUSTAINABILITY Through Product

*The award winning FLITE Board range of electric foil boards includes this beautiful wood finish version developed with COBRA. Not just incredibly aesthetically pleasing, the wood veneer construction is also durable and creates a POSITIVE IMPACT with COBRA'S high quality finishing.*







## ONE BOARD, ONE TREE

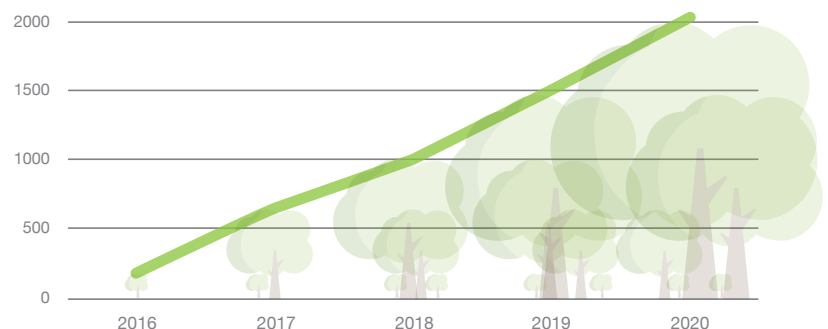
In 2019, COBRA began to work on offsetting its carbon emissions. Rather than purchasing carbon credits or investing in offshore offset programs, COBRA, in collaboration with the Department of Marine and Coastal Resources (DMCR), has begun its own mangrove planting project within Thailand.

Mangrove forests are not only superb CO<sub>2</sub> absorbers but, straddling the border between land and sea, these forests and their root systems help to anchor and protect coastlines from erosion whilst also creating a wonderful habitat for everything from fish and crustaceans to nesting birds and mammals.

With the help of staff and volunteers, COBRA is starting their own planting program from scratch. From seeds to forest, we want to invest as directly as possible in the plants to offset our emissions right here in Thailand. In 2021, COBRA will start to plant our first crop of seedlings with the ambitious goal of one tree for every board produced in its facility in 2022. This would mean well over 100,000 new plants and a potential mitigation of over 100,000 tons of CO<sub>2</sub> emissions.

Over the forthcoming years, COBRA also hope to further develop and formalize its planting project in order to be able more accurately quantify the amount of CO<sub>2</sub> mitigation achieved and what that means for the overall carbon emissions at COBRA.

New Trees planted at the Factory  
(Cumulative)



## SINGLE USE PLASTIC

In 2020, COBRA made significant changes to the way it utilized single use plastic in the factory, these included:

1. Reduction of single use plastic in COBRA canteens.
2. Increased recycling of general waste on COBRA grounds.
3. Reduced reliance on single use plastic in production processes.
4. Staff education around the impact of single use plastics and ways to reduce consumption where possible.



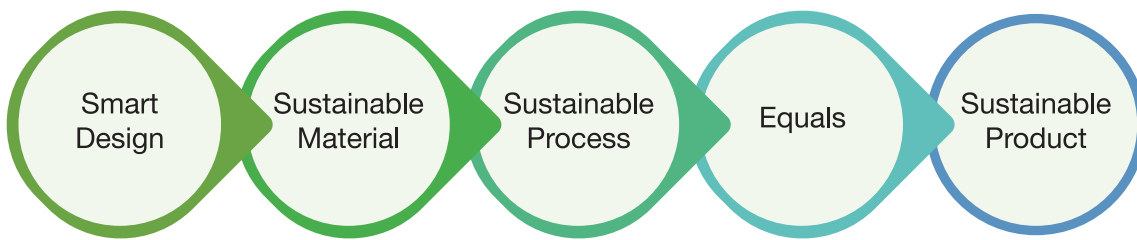


In addition to this, COBRA embarked on a significantly larger mitigation project by beginning to transition the entire product packaging for watersports boards and accessories from single use plastic to paper based packaging. Whilst not yet suitable for all composite products, in just the first year, it was possible to swap 70% of single use plastic products for paper alternatives.

In the coming years, COBRA hopes to continue to innovate and collaborate with suppliers and customers to find more sustainable packaging solutions for all composite parts delivered.



## NATURAL FIBER COMPOSITES (NFC)



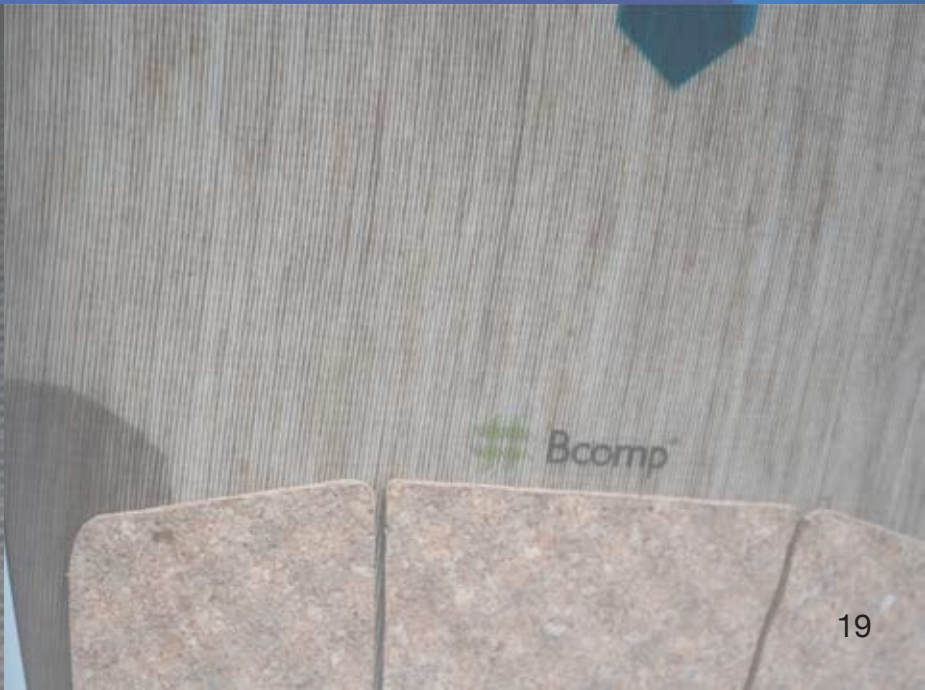
Products that are carefully designed to provide the customer with the best possible performance whilst also being light, strong and durable are significantly less likely to end up discarded and in land fill. COBRA is able to utilize over 40 years of experience in composites production to help its customers find the most sustainable solution for its customers.

It is important for customers to consider the usage and overall life cycle of a product during the R&D and materials selection process. Whilst materials selection is the most obvious route to a more sustainable product, more traditional materials like carbon or fibre glass still have their place in composites and could result in an overall higher performance part.

Having developed a host of innovative production processes with a broad range of sustainable material alternatives ranging from bio-resins and natural fibers through to water-based paints and sustainable packaging solutions, COBRA is able to work with each customer to develop a solution that is right for them.









## **CIRCULAR COMPOSITE PRODUCTION**

Cradle to Cradle design has been an inspiration and goal at COBRA for many years. Whilst it is clear that composite manufacturing in most of their current applications still have a long way to go before becoming truly circular, COBRA continues to work with partners across the supply chain to get closer to that goal. By collaborating with customers, raw material suppliers and research institutions, COBRA hope to continue to innovate and find ways to make the composites industry into a part of the circular economy.

The most recent success story was the development of a 100% recyclable epoxy composite surfboard fin. Developed in collaboration with MFC Hawaii Fins, Starboard and Aditya Birla, COBRA successfully integrated novel recyclable epoxy resins (Aditya Birla's proprietary Recyclamine® technology) into its series production of water sports components, initiating a closed loop process to re-use the recovered reinforcement fabrics and thermoplastic polymers produced when the epoxy composite is recycled.

The process was applauded by the composites industry and won the 2020 JEC Innovations Award.



“This is a fantastic achievement with huge potential to make more sustainable epoxy components. Building on the success of this project, COBRA and our partners are now focusing on scaling up the recycling infrastructure. Starboard and MFC will offer recyclable epoxy fins to customers throughout 2020 and COBRA is also working on the next stages to use recyclable epoxy resins for larger components and moulds within the group”.

*Paolo Cecchetti, Chief Innovation Officer*



# SUSTAINABILITY Through Process



COBRA has built up over 40 plus years of production experience in composite manufacturing. Throughout that time, COBRA has grown to understand both the economic and environmental value of ensuring production is operating as efficiently as possible.

Once a product is ready for production, lean production processes are employed to ensure that the raw materials are converted into the finished product as efficiently as possible using the minimum amount of energy and with as little waste as possible.





## ELECTRICITY

Electricity remains one of Cobra's largest CO2 emissions components during production. Every year the COBRA team works to reduce its energy consumption through increased efficiency, implementation of power management technologies and equipment upgrades.

While optimization is an important first step, COBRA is also committed to moving more of its remaining energy consumption to renewable resources with a plan to install alternative energy streams such as solar in 2022.



*Kh.Prach has overseen the Bio-Boiler project from start to finish and is proud to see the impact it has had on the factory*

## BIO-BOILER

As of 2018, COBRA has switched its boilers in the factory to Biomass based boilers. By upgrading the boiler system, COBRA has been able to reduce its impact through cleaner conversion of energy to useable heat and also reduce the reliance on fossil fuels as the new boilers run on 100% biomass pellets produced from agricultural waste products.



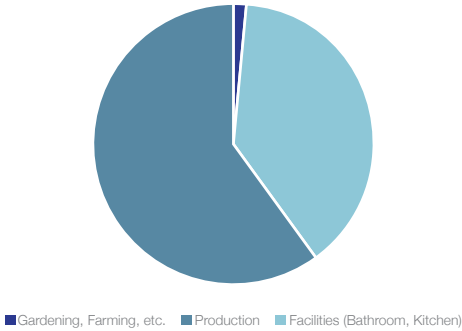
WATER

Water is a scarce resource in Thailand. Although a relatively tropical climate, the rainy wet season gives way to a long dry season that can bring months without a drop of rain.

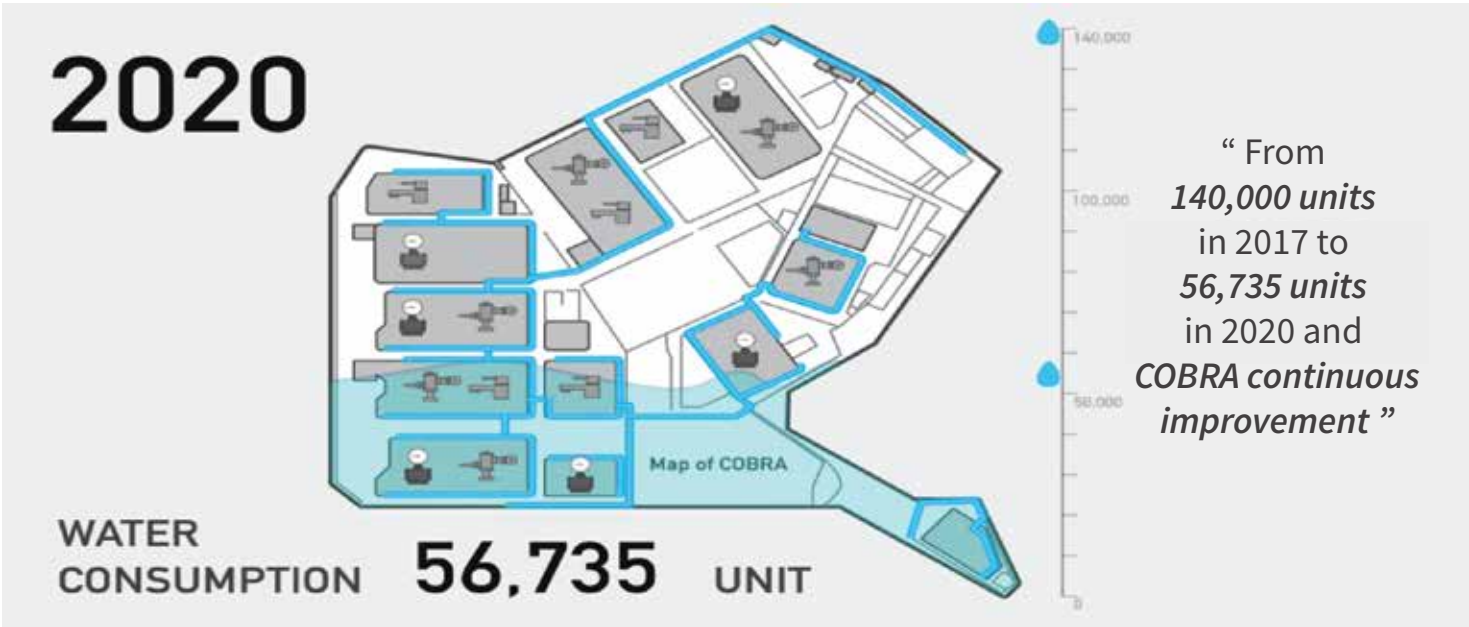
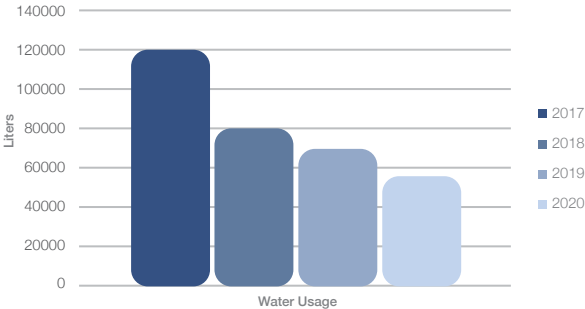
To ensure that the entire Amata Industrial Estate and its community are not at risk of water shortages or overly reliant on outside water supplies, use of water on the estate is carefully managed. Every factory is required to pay for their wastewater treatment and recycling, and to do this efficiently, Amata sets strict quality compliance standards for the water leaving each factory.

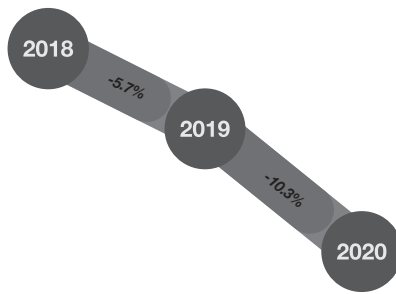
While water within the estate is recycled, COBRA still does what it can to reduce consumption. Over the past 5 years, COBRA has been incredibly successful in minimizing production water consumption. To reduce this impact further, in 2019 COBRA began a 4 year project to upgrade the sanitary facilities across the factory in the aims of further reducing the water consumption of our nearly 2,500 strong staff.

Water Consumption by use

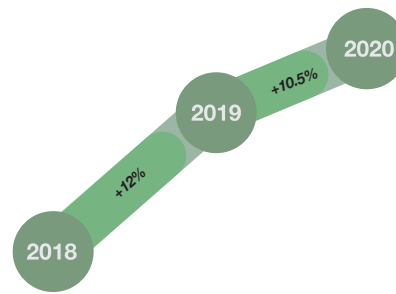


Total Water Consumption Cobra Facility





*Overall Waste Reduction Year on Year*



*Recycling Increase Year on Year*

## WASTE MANAGEMENT

COBRA continues to develop its production processes and technologies to reduce the amount of waste generated. Composites generally produce a lot of secondary waste throughout their production from vacuum bags to sandpaper. While eliminating this waste is not yet feasible, COBRA does everything possible to ensure it is properly managed, sorted and recycled.

Beyond our standard sorting and recycling operations, Cobra is also committed to re-using materials and off-cuts effectively within our facility while minimizing loss of material value. Unused clean fiberglass cloth off-cuts for example would traditionally be sent for re-processing into lower grade chopped mat or other short strand fiberglass products. However, through process optimization we are starting to be able to effectively transfer materials off-cuts across our facility allowing hundreds of kilograms of cloth that would have been sent off site to be used as high quality raw material in smaller products.







*Our 2500 sqm on site waste sorting station has been the backbone of COBRA's waste reduction and recycling project for many years.*

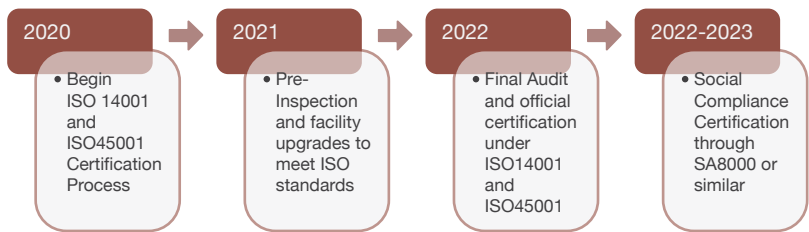


SUPPLIERS

We choose our partners based on their ability to deliver innovative manufacturing expertise that best supports our long-term quality product demands and sustainability goals. All of our local and international manufacturing partners adhere to guidelines and maintain certifications and best practices needed to fully support our expectations as they relate to the health and well-being of our partner workers.

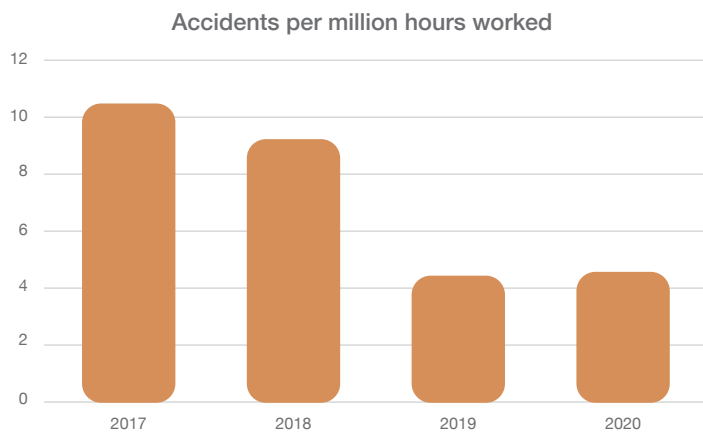
ISO CERTIFICATION

In 2020, COBRA began its ISO14001 and ISO45001 certification. These two certifications are the first steps to formalizing and auditing environmental management and occupational health & safety systems. Whilst COBRA was already doing a significant amount of work in both areas, the certification process has enabled the company to better quantify its impact, understand its processes and make more measurable improvements.

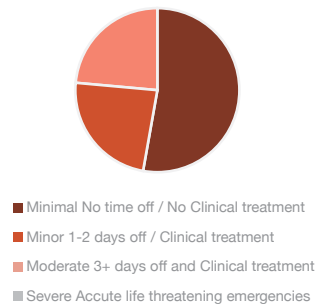


COBRA had already taken significant steps to drastically reduce occupational injuries before ISO45001, the certification process has also helped the group come even closer to its target of zero workplace accidents. In 2020, COBRA was able to manage just 4.5 accidents per million working hours, of which over 50% where only minor injuries that required no time off work.

Continuing to work towards the final audit at the beginning of 2022, COBRA is excited to see what we are able to achieve utilizing the improved ISO management systems.



Accident Severity % of total case





## **SAFETY WEEK**

Now in its 15th consecutive year, COBRA's annual safety week provides departments with the opportunity to brush up on their safety and first aid skills through clinics, activities, and competitions. A number of staff took part in this year's event promoting safety across the workplace.

## **COBRA FIREFIGHTING TEAM**

COBRA's in house firefighting team plays a vital role in first aid support and the overall safety of the factory. Made up of a diverse cross section of staff, the volunteer team takes regular training days and is often the first response in the event of serious injury or other critical events within the facility.





[www.cobrainter.com](http://www.cobrainter.com)





