



Top Green Building Materials
Made in Taiwan, providing you with safe,
healthy, energy efficient and happy spaces.



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The Green Building Material Industry of Taiwan filled with Hidden Gems

Taiwan is known by the world for achieving economic miracle through its global exports; additionally, the agility, responsiveness, innovativeness, and credibility of Taiwanese businesses have also established global reputation.

In recent years, green economy has gone mainstream in response to the extreme weather and environmental changes, every country around the world is striving to develop a green industry. In 2014, the global market of green products reached 1.4 trillion USD, and the signing of the Paris Climate Agreement has further elevated the demand for green products. Energy efficiency, smart city, IoT, and circular economy are all industries with great potentials over the next decade.

Not to be left behind, Taiwan's industries have already positioned themselves in advance for success in the future. As the most important facilitator, "Green Trade Project Office, Ministry of Economic Affairs," is also actively fulfilling its responsibilities providing businesses guidance and assistance. Whether it is LED, solar PV, green building material, textiles, or environmental protection, the office has already helped many excellent companies in different industries to enhance its international competitiveness and image through "training," "information provision," "matchmaking and marketing," and "branding;" for example, after receiving assistance and guidance from the Green Trade Project Office and participating in overseas business delegations, the export volume of Hengs Technology that specializes in solar PV systems multiplied by nearly twenty times over the past four years. There are many other companies that have been obtaining recognition and growth in oversea markets as well. Paper Shoot, after having Green Trade Project Office conduct a marketing diagnosis and provide a marketing strategy, has successfully gained the attention of international media, including Japan's TV Asahi, AFP Hong Kong, and Wall Street Journal.

In fact, Taiwanese industries are full of hidden gems and quality products. We specifically focus on green building materials at this moment, because we spend the majority of our everyday life in various spaces. Whether it is our office, home, or public venues, we spend

over two thirds of our day in certain indoor spaces, in which these spaces could potentially have significant impacts on us. Furthermore, safety, energy efficiency, toxic-free, and health have since become mainstream demands in architecture. Encouraged by the government, Taiwanese building material manufacturers have developed a wide range of world-class green building materials; from formaldehyde-free wooden boards, to healthy energy flooring, energy-saving glass, environmental-friendly PE foam, eco-friendly ceramic tile, and toxic-free adhesive, all these products have surprised the world with their unparalleled quality and creativity, as it continues to gain global recognition and attract purchasers.



Green Trade Project Office presents “Top Green Building Materials—Made in Taiwan for Safe, Healthy, Energy-Efficient, and Happy Spaces” to introduce ten excellent handpicked green building material manufacturers. Some of them are long-established brands, such as Taiwan Glass, Yung Chi Paint, and Champion; some have worked hard for years, and strived for innovation in order to meet certain standards, such as Perma and Mega Master Technology; some have been actively building their own brands, including Order System Furniture and Sanyeu; and some are full of creativity and ambition, such as Mosia, Ua Floors, and Sun Rubber Works. We realize that quality products only come from persistent and idealistic owners and teams; if creativity is what makes products better, then it is the ideal of innovators that ensures sustainable development while people pursue better living.

**Deputy Director,
Green Trade Project Office, MOEA**

Tsai, Chen-chiu

The Three Missions of the Taiwan Green Building Material Council

If the earth suffered severe destruction, causing air, water, and other resources necessary for human survival to become scarce, could people still live in happiness? Decades ago, many people could not imagine that mankind would be facing such crisis; however, in the past few years, we have been seeing more occurrences of extreme climates—typhoons, floods, earthquakes, tsunamis, and forest fires—in addition to nature's retaliations becoming ever-more frequent and immediate. We can no longer afford to just stand aside.

Countries around the world want to save earth, and are now engaging in various activities that contribute to environmental protection, resulting in green economy becoming top priority. In 2004, The Taiwanese government promulgated laws and regulations on percentage of green building materials used in construction, furthermore in 2008, domestic building material manufacturers got together and formed the Taiwan Green Building Material Council, aiming to promote the use of green building material within the private sector.

Over the past few years, the environmental awareness of people have risen, as the R&D and use of green building materials continues to increase; however, time is not on our side, and looking ahead, there are three missions the Taiwan Green Building Material Council must accomplish:

1. Increase the percentage of green building materials used. The government demands that all architectural spaces must use green building materials. At first, the requirement was 5%, which was later increased to 30%, and now 45%. In the future, the percentage should be further raised, with an ultimate goal of using 100% green building materials. This top-down approach will encourage more manufacturers to be engaged, create a friendly environment, and give rise to harmless building materials. After all, there should not be any compromises when it comes to health.
2. Green decoration certification. Currently, we have green building material and green building certifications. However, green decoration is also of tremendous importance; from traceability of green building materials, to the results of air quality test for VOCs at the end of decoration, it is important for us to pay attention to all aspects.

I can share the experience of a friend. This person spent 4 million NTD on eco-friendly kitchen furniture imported from Germany. After installation, he had another company help test whether the furniture contained formaldehyde. The reading kept rising after the

instrument was turned on, which was increasingly displeasing to him. How did it happen, considering that Germany has always had strict standards when it comes to eco-friendly certification? He eventually had people from the original manufacturer take a look, and found out that changes were likely to occur in green building materials due to temperature and humidity. Both the temperature and humidity are lower in Germany, and when the green building materials that meet the standards in Germany are imported to Taiwan, the hot and humid environment draws out hidden VOCs. This happens to green building materials from any country, and adjustments must be made in advance to cope with local climate.



If we had green renovation certification, we would be able to avoid situations like this. We can only protect those living in the space when we are able to guarantee the quality of renovation. This will also enhance the value of our homes.

3. Introduce Taiwan's green building materials to overseas markets. Local industries possess excellent products and manufacturing technology. At the moment, there are over six thousand applications for green building material certification, most of which are in the healthy product category. If we establish overseas joint marketing base or business platform, such wonderful products will soon conquer the global green product market.

Taiwan's manufacturers have always been competitive in the global market, and we shall not overlook the strengths of domestic green building materials. Not only have they garnered praises domestically, they have also gained wide recognitions at international shows. With the council providing guidance and assistance, we hope that more people will get to know about Taiwan's prided green building materials, and we strive to do our part to contribute to the industry, as well as the life quality of people around the world.

Chairman of Taiwan Green Building Material Council

Edmund. Tiao

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Mosia Green Home Corporation

Give You the Most Healthy Home



MOSIA General manager Edward Jao (right) MOSIA Deputy General manager Cash Jao (left)



If you look closely, you will see that Mosia’s logo is the combination of bamboo section and bamboo leaf. Bamboo has sections and is hollow at center, and has long been the symbol of “integrity” and “humbleness” in Chinese culture, and a favorite plant of scholars. To General Manger Edward Jao, his encounter with bamboo began with a typhoon. Before founding the company, Jao was involved in retailing of traditional building materials. Bamboo was just one of the many items, and he knew how to persuade customers to use it. After an unexpected flood that reached nearly the second floor, he was picking up the bamboo floor panels that submerged in the water overnight, and discovered that they did not deform nor become moldy, and that was when he realized the true value of bamboo. At that moment, he decided to promote this material.

“Over 99% of timber resources in Taiwan are imported, but we fail to take advantage of bamboo, which we are ranking top three in the world in production. Furthermore, bamboo is a great eco-friendly material.” Said General Manger Jao passionately. Bamboo takes three to four years to grow, and the felling cycle is short. If we use more of bamboo, we can prevent forests from disappearing. “Besides, the quality of Taiwan’s bamboo is unparalleled, because we have diverse soil and humid climate, and places that produce bamboo have strong winds, so the bamboo is usually very resilient and sturdy. Like bamboo swords used for Kendo, they tested around and only use Makino bamboo from Longtan now.”

With confidence in Taiwan’s bamboo, and the unique peeling technique, Mosia’s bamboo chips and floor panels quickly won the hearts of consumers, and made a name in the global market. Su Dongpo, great scholar from Song dynasty, had said that, “without bamboo, one becomes vulgar.” And in Western Jin dynasty, there were the famous “Seven Sages of Bamboo Grove.” These scholars loved to debate in bamboo grove. Renowned contemporary calligrapher Dong Yangzi has once chosen Mosia bamboo chips as invitations. Featuring mainly Taiwanese bamboos, Mosia explores the blue ocean utilizing the charm and artistic quality of bamboo. The one thing happened, and made Mosia consider a shift of direction.



“One year our sales representative went to a client’s home for measurements, but he ran out of the doors within less than one minute. At the time, the house was just renovated and painted, and the sales representative said he got teary eyes as soon as he got in there and could not work.” The cause of teary eyes was what people mistakenly believed to be “the scent of new home.” Actually, it was caused by vapors of toxic gas such as formaldehyde. “This incident alarmed me, that it is not enough for one building material to be healthy. If only our floor is healthy, but the cabinets and paints are all poisonous, the floor is useless. Consumer still live in a slowly vaporizing gas chamber.”

So General Manager Jao led his coworkers to try to find the “causes,” what else during renovation would need toxic materials? And the results showed that the scope was extensive, from basic materials such as ceiling angles, plywood of cabinets, and glue used for wood surface, they all contain VOC. Living in a house like this for a period of time, people will get headache and dizziness, lose sense of balance, and have respiratory problems; and formaldehyde is a major element that causes cancer. General Manager Jao remembered that some friends and relatives involved in construction had all been diagnosed of cancer. Although he could not be fully sure that it was because they were exposed to such toxic materials for a long time, more or less it was the result of bad working environment. So General Manager Jao decided to expand his research, and revamped Mosia’s product line. “I hope to provide consumers a non-toxic space form the inside out.”

At first they developed a formaldehyde-capturing agent, but this method only eliminates formaldehyde on the surface, temporarily decreasing the concentration. After two years time, they finally developed an exclusive technique, and produced formaldehyde-free materials. He opened two wooden cases for us to smell. One was the “scent of new home” (formaldehyde) we are all familiar with; and the other was a light fragrance of wood. “This is currently the one material with the lowest formaldehyde content in the world.” Said General Manager Jao with much confidence. Imaging being in a room full of this scent, it would be as if you were in a forest, healthy and soothing. In addition to panels, Mosia also strived to develop the healthiest surface materials. They also cooperated with partners to develop non-toxic adhesive to replace traditional white glue and power glue. They also looked for partners to cooperate on healthy



paints. Mosia hopes to become the Apple of green building materials. General Manager Jao said, “Our core value is health. We handle our own distribution, clients, and marketing, and integrate contractors and designers for R&D; ultimately we aim to provide consumers a one-stop shopping service. Come to our experience pavilion, and you will be able to create your very own exclusive non-toxic space.”

“Green building materials, green renovation, green design, the healthiest home.” This is Mosia’s ambitious goal, and General Manager Jao believes that only by creating green space, allowing people living inside to be comfortable and safe, can green architecture showcase its worth. When there are more and more green architectures like this, we will be able to build ecological cities, and reach our ultimate goal of green earth. Just as he saw the practical and ecological values of bamboo when he picked them out of the water, from the development of bamboo products to comprehensively development of interior building materials, Mosia has never forgotten its original mission—stop hurting the earth.



Quality Green Building Material Products by Mosia

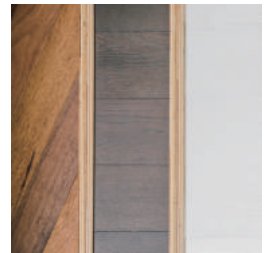
Daily Secured Healthy Board Series Plywood, Lumber Core Plywood, Soundproof Plywood

With exclusive patented technology, Mosia solves the problems of pest, ungluing, and high formaldehyde concentration. Winner of Healthy Green Building Material Label, the amount of vaporized formaldehyde is substantially lower than 0.3mg/L of F1 boards. Any number detected higher than 0.3 mg/L, Mosia guarantees to compensate NTD 100,000. Also, Mosia offers ten-year wood silverfish warrantee. The series is suitable for ceiling, floor, partition, cabinet, and closet.



Daily Secured Healthy Bamboo and Wood Flooring

Using Daily Secured Healthy materials to prevent pests, curvature, deformation, and ungluing. The materials are abrasion resistant, dirt-proof, moisture proof, anti-bacterial, and soundproof. Comes with a wide variety including wood pattern or bamboo pattern.



Eco-Friendly Water Based Instant Adhesive, Oil Based Instant Adhesive, Water Based White Glue

Non-toxic, healthy, odor-free, and suitable for melamine boards, veneer board, plywood, cork, and MDF, as well as Styrofoam, and plaster tablet.



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Ua Floors

Lending a Hand to a
Healthy Living style



Ua Floors Chairman Andy Su



As an old saying goes “to live is to keep moving,” but people nowadays often “have the motivation but not the time, or have the time but not the motivation.” To modern people who are always busy, Ua Floors’ non-toxic, energy healthy flooring may lend a helping hand. “We have bad air quality, and food safety is a big issue, so we need good metabolism to discharge the toxins from our bodies. But how do we increase our metabolic rate without exercising? Ua Floors’ non-toxic energy healthy flooring is up for the task.” What Chairman Andy Su said triggered our curiosity, and we conducted an experiment right away. Under the microscope, we saw the blood flowing slowly in the capillaries of our fingers; however, when we placed another hand on the floor, the blood seemed to be energized and thus flowing faster. It was amazing. Ua Floors used exclusive technology to inject nanonized natural minerals into the vessels of the floor panels. These minerals can convert heat and light energies absorbed from the surrounding environment into Far-Infrared-Ray; after the human body receives this energy, it vitalizes the cells, facilitates the circulation, increases oxygen content in the blood streams, and speeds up metabolism, enhancing the immune system. “We did an experiment where we left an animal with high blood pressure in a room lined with non-toxic energy flooring for two weeks, and its blood pressure came down. This research was also published in BioMed Central, a leading British journal in bioscience.” Furthermore, for senior citizens who are not as active, or people with weaker physical conditions, the energy flooring can help them enhance their long term health; in other words, “A healing space made of non-toxic energy healthy flooring allows the person to relax, while it also vitalizes their cells.” No wonder Chairman Su always looks so energetic.

However, the concept of this healthy wood flooring that has obtained patents of infrared wooden product in Taiwan, Japan, and China, was only developed when the economy hit rock bottom. Taiwanese industries were almost flattened by the financial crisis in 2008. To avoid forcing his employees to go on unpaid leaves, Chairman Su decided to use the time for education and training. At the same time, he also launched a quality assurance initiative and focused on R&D. At the time, he decided to focus on producing healthy wood flooring with the objective to “become the world’s only one instead of the number one.”



Before touching Energy Healthy Wooden Products



Thirty seconds after contacting Energy Healthy Wooden Products



Chairman Su continued to work with employees to come up with ideas for new products. “Back then, all the news channels were full of negativity, and I thought that it might be causing more and more people to become depressed. Therefore how could we as building material makers help people relax more?” Chairman Su recalled. They had the idea of injecting lavender extract produced in France into vessels of the wooden flooring, but then they realized the cost was too high, and the ensuing maintenance also required a lot of work; so despite having produced final products, they decided to abandon the idea. Nonetheless, this project gave rise to the energy healthy flooring; not only does the product have wonderful effects, Ua Floors also offers a lifetime warranty.

The financial crisis enabled Chairman Su to squat lower and jump even higher. Looking back, every crisis allowed Ua Floors to grow stronger, even the founding of the company was by an unexpected chance. “Many years ago, a friend asked me to venture into China with him for business opportunities. However in less than three months, the owner of the company was gone. After I took charge and led the employees to wipe up the floors for the company, they asked me to form a business on my own, stating that they were willing to follow me.” This was how Chairman Su started in the building material industry; although he has earned himself much success, when the 921 Earthquake took down the entire building industry in Taiwan, the market of building materials shrunk by 70% in the following year, leaving only businesses coming from pre-owned houses.

“This event made me consider the export market. We must look beyond Taiwan and explore the markets in other countries.” Two years later, Ua Floors set up factories and transitioned from technical processing to having its own brand. Chairman Su often took the products they developed to participate in exhibitions in the United States. “I always have the





consumers' best interest in mind, often thinking that who will be the ones that come in contact with the floor most often, and what I can do for them? At the time, I had young children at home, and I found out that children of three to four years old often play on the floor, picking up random things or toys and put them into their mouths. This pushed me to want to produce an antibacterial safe flooring." Today, the company has developed the most advanced nanobacteriostatic technology, and "Ua Floors" has become a trusted brand for its unparalleled quality. From the Pentagon in the U.S., the shopping center of Burj Khalifa in Dubai, the mansions near Central Park in New York City, the i-Store in Taiwan, the showrooms of luxury brands, to the high-end development projects and the Southern Branch of the National Palace Museum, they all used Ua Floors' wooden flooring.

"We carefully select materials from all five continents that have been certified by the Forest Stewardship Council (FSC) or the local government; additionally, the bottom layer of birch plywood is imported from Europe and Russia, ensuring from the sources that the materials are pest-free. Also, vegetable oil is used to saturate the wood fibers in the place of resin coating for moisturization and protection, presenting the most natural wooden texture and pattern. This way, the floors are more natural, and the living environment is healthier!"

Non-toxic, healthy, and energy have always been Ua Floors' principles. Chairman Su said that during the 311 Earthquake in Japan, he heard a story in the news that saddened him. "Taiwan sent a batch of partition walls to Japan, but the inspection at the harbor found that the free formaldehyde content was too high, making these walls unusable. Some commentators on the news channels questioned the victims of the disaster: 'What would you rather do, inhale some free formaldehyde or freeze to death?' I was furious. As a developed country, why do we use materials that cannot even pass another country's inspection?" So, for the love of the Taiwanese people and people all around the world, Ua Floors continues to raise the bar under the leadership of Chairman Su, a devoted Christian, as it tries its best to become the guardian of every household, and the health of every person.



Quality Green Building Material Products by Ua Floors

Wood Flooring

comes in wide varieties, including pine, teak, hickory, maple, and oak, each showcasing its own unique patterns.

Unlike traditional cold-pressed floorings, Ua flooring does not have the issue of glue failure. The flooring is manufactured through the hot pressed method, which effectively reduces the likelihood of glue failure on the surface, maintaining a stable quality of the product. High-temperature / pressure technologies resolve the issue of pests, and therefore no chemical agents has to be added to the wooden flooring. Ua carefully selects "natural vegetable oil imported in its original packaging from Germany" for surface coating, allowing consumers to touch the real wooden material; the oil also helps the flooring to naturally release negative ions. Ua's professional team has developed a nano coating to go along with its exclusive patented Far-Infrared-Ray technology; after nanonization, the coating can penetrate all vessels of the wood flooring while keeping the surface texture authentically wooden.

Energy Healthy Wooden Products

Ua collects scrap materials for reutilization; by injecting nano Far-Infrared-Ray, the materials are made into watches, pens, lady's shoes, and even mouse pads.

Wood Surface Protection Extract

made from cedar extract, the product protects wooden floors and wooden furniture from termites and silverfish bugs. While being completely natural and toxic-free, the product can also help purifying the air.



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Order System Furniture

Path to the Leading Furniture Brand in Taiwan



Order Vice Chairman Dennis Ma



Most people think of Order when mentioning system furniture. Indeed, this company with over twenty years of history has established itself as Taiwan's leading brand in system furniture. Order uses panel materials from Germany, imported directly from Europe, as it hopes that local Taiwanese people can enjoy the world's best quality designer's products.

In Taiwan, where contract manufacturing is the norm, it was a bold and visionary move by Order to establish its own brand, and it has not been a smooth journey. Vice Chairman Dennis Ma said with a smile: "We had aimed to establish our own brand since we first founded Order. However, in the beginning we focused on production and manufacturing. Later on, we learned that we needed distribution channels to gain access to markets, and so we began to set up physical stores. Today, we have over 100 stores around Taiwan, and employ over 300 designers. Over the past two decades, Order has provided people in Taiwan with modern furniture that is both aesthetic and practical, while keeping pace with global trends. The brand has gained love and trust from its consumers, and now we can proudly say that 'Order System Furniture is the Pride of Taiwan'."

It is hard to build a brand, as it also takes a long time to do so. At first, Order started with kitchen furniture, office walls and cabinets; later on, it evolved into providing designs that cater to the customers' spaces and needs. "Other countries do not have a term such as system furniture. But we utilize the properties of particleboards to cut out specific pieces that can be assembled like building blocks, providing tailored solutions for customers' office or living spaces. Throw in the wide varieties of door handle hardware and colors, Order has since become the largest interior design company in Taiwan."

The greatest challenge along the journey of building the brand was perhaps how to introduce the particleboard imported from Germany to consumers. "Early on, MDF (medium density fiberboard) was popular in Taiwan. It was cheap, but not durable. So when we first introduced particleboard, many thought it was MDF." The truth is that these two are worlds apart. Every one knows how meticulous and careful the Germans are; they not only carry out systematic forestation, they also invest much effort in nurturing its forests. Every tree must have exposure to the sun, so they can all grow into quality timber. To make particleboard, these carefully fostered trees are pressed into long strips through high temperature and pressure. They have veneer or laminate surfaces, and are sealed on all four sides.



“Particleboard is considered a green building material because it does not impact the natural forest. Over sixty percent of the material comes from artificial forest, and thirty percent from recycled materials. Also, it does not contain formaldehyde. The Germans have been using these materials for a long time.” In addition to being environmental-friendly and harmless to the human body, particleboard has a heat resistance up to 240 degrees Celsius; in addition to also being scratchproof and acid and alkaline resistant. “This is why, early on, many labs were built with particleboards.” Said Vice Chairman Ma. However, to create a greater demand and market, it was necessary to introduce particleboard to the general public, and there was no other way to do so than to educate the consumers. “When we visited the clients, we used coins to scratch the board; we even left lit cigarettes on the particleboard. A client once thanked us, saying that a fire broke out at their home, but fortunately he used Order’s furniture, and since our material is fire retardant, it was the reason why the fire did not spread. In fact, particleboard is not just a green building material, it is also a fireproof building material.”

“Due to its island climate, Taiwan has high humidity. If indoor ventilation is not good, the moisture in the air will become a great threat to solid wood furniture. However, particleboard is moisture-proof, and therefore has a longer lifespan when compared to solid wood.” Furthermore, boards nowadays have skin patterns that are as real as solid wood. All these advantages have made particleboard more popular. With the rise of the Internet, it is easy for people to search for information online, and this has further facilitated Order’s rapid growth. Vice Chairman Ma said, “We no longer have to educate consumers, telling them the advantages of choosing particleboard; rather, we need to open up new stores to take Order into the next stage of integrated design. We should spend more time communicating with clients regarding the design. In addition to system furniture, we have also founded Uwood to provide solid wood furniture so clients can choose the items that match their spaces perfectly.”





This means that even if you have an empty house, everything would be dealt with after you walked into an Order store. “We differentiate ourselves from others by having one designated representative to introduce the products, plan the space, and design; this person is both the salesperson as well as the designer. Consumers no longer have to deal with different contact windows, and whenever they have a problem, they just have to look for the designated designer. Furthermore, we also have an experienced professional team that carries out all the constructions.” There are often disputes when it comes to renovation, but Order is a large company with sound systems in place, so customers do not have to worry about the quality of construction, availability of contact person, and access to aftersales services or channel for customer complaint.

“All Order products come with a five-year warranty. Every year, we mail out tabletop calendars and new catalogues to our customers, and ask them if they need inspection and maintenance.” From the product, planning and design, construction, to aftersales services, Order has won over the hearts of its clients with its excellent services. Every year, 40 percent of its revenue comes from referrals by old clients, and a large part of its revenue relies on word-of-mouth advertising.

“Another strength of system furniture is that they can be disassembled and reassembled. We often receive calls from clients asking us to help them move their furniture to their new house.” CEO Office Manager Liu Miao-Ping said, “I sold my house once, and I left behind my system furniture for the new owners. Surprisingly, the new owners fell in love with it, and later when they were moving out, they called and asked us to help them move the furniture away.” Also a fan of Order, Manager Liu was eager to share her love for Order: “Also, by changing the color or handles of the system furniture, you can give the house a brand new look. You can also make adjustments in accordance to your needs. For example, when your children grow up, or when you have more things to put away, you can add more cabinets to solve your storage problem.”

On this journey of brand building, Order has encountered bumps along the way, but it has also remained determined and ethereal. They have conquered their clients with high standards, like the time they made an adjustment seven times until the client was satisfied; they can also meet high-end requirements of luxurious mansions. And with this spirit, we believe that the brand will continue to shine brighter and brighter, becoming the glory of Taiwan.



Quality Green Building Material Products by Order

System Furniture

The first in Taiwan to launch the “Healthy Green Building Material,” promoting healthy, environmental-friendly, and non-toxic system furniture, and providing citizens in Taiwan with a high quality lifestyle from Germany. All boards are certified Green Building Material, and the brand has gained satisfaction and trust of all consumers, winning “Trusted Brands Gold Award” in consecutive years.



Order Mattress

Environmental-friendly non-toxic green mattresses. The product has received EPA's Environmental Protection Mark, and won the recognition of the 21st Taiwan Excellence Award.



Order Sofa

This Made-in-Taiwan sofa has won the recognition of the IF Design Award.

Uwood

The brand strives to create quality living space with solid wood furniture; it pursues high quality while also exploring innovative possibilities. They offer thoughtful services including free onsite measuring, free 3D planning, free delivery and assembly, and free removal of old furniture, guiding customers to create a wonderful living space that manifests into its own unique style.



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Sanyeu Building Materials

Evangelist of Green Building Materials



Sanyeu Chairman Chen Tung-Ching



Everyone knows that the lobby on ground floor is usually a company's face, but Sanyeu has turned it into the Theme Pavilion of Green Building Materials, moving its own display of architectural spaces to the second floor. "If we lease this floor to a tenant, we can get a few millions annually. But I turned it into the Theme Pavilion of Green Building Materials, hoping that people can learn more about green building materials, and do my part for the earth's environment." Chairman Chen Tung-Ching treats his business as his mission in life, and is the most devoted evangelist of green building materials.

This Theme Pavilion of Green Building Materials that has won the Taiwan Green Classic Award in Services shows visitors the crisis faced by earth, impact to ecology, and various kinds of environmental-friendly green building materials and green architectural technologies through all kinds of installation art. Chairman Chen says, "Every month, many organizations and schools will book with us, and usually about 500 or more people will come visit. We even had kindergarten kids, and our guides would tell them stories. They were always very interested, and said that they would go home and tell their parents to use green building materials. I always felt very satisfied when I heard something like that."

Sanyeu was first a tile dealer, often searched for various building materials overseas. Chairman Chen discovered that in Europe and America, environmental protection was a common awareness. "It was basic for building materials to be non-toxic and harmless to human body; unlike Taiwan where early on we had building materials with dangerous levels of formaldehyde." At the time, Sanyeu screened the materials it imported, so when the government began promoting green building materials, Sanyeu immediately applied for its Nano paint, becoming the first inner-wall paint to receive the Healthy Green Building Material Label, and launching the trend of domestic paint industry shifting its focus to non-toxic and harmless products. "Now, about 70% to 80% of paints in Taiwan are green paints." Chairman Chen said with a sense of satisfaction.

Also, Sanyeu's wooden materials and building partitions were the first in their categories to get the Green Building Material Labels. "We spent a lot of money and time, it was not easy to be the pioneer." However, in his past experience visiting various parts of the world,



Chairman Chen saw other countries' devotion to environment; together with the government's promotion, Chairman Chen decided to focus on green building materials, modifying Sanyeu's corporate mission to "Earth sustainability, human health."

"Green building materials can be categorized into ecological, healthy, high performance, and recycled green building materials. Currently, Sanyeu is more focused on healthy and high-performance products." For example, "Feather - Breathable Brick" can regulate indoor humidity; when indoor humidity is too high, bacteria and dust mite will grow, and they are main causes of skin disease and allergy. If "Feather - Breathable Bricks" are used on some of the walls at home, consumers will be able to create a comfortable space with moderate humidity. Furthermore, the bricks can help maintain air quality in the room by removing odors. "This is truly a very versatile brick. You can put it in your shoe cabinet, closet, or refrigerator, and you will find out how well it dehumidifies, deodorizes, and prevents molding." Chairman Chen took out small souvenirs made from the breathable brick and gave them to us. "You just have to expose them to the sun, and then you can reuse it." What a fighter for environment, never wastes anything if it can be reused.

Another product, "Feather - Renewed Wood," is also strongly recommended by Chairman Chen. "Solid wood has the issues of pests, molding, and discoloration. The pest control agents added to the material is harmful to human body, but renewed wood overcomes these weakness." Consisting of 50% recycled plastic, 40% recycled wood, and 10% functional add-in materials, the renewed wood withstands water, heat, and sunlight. "It is more durable, and





comes in various patterns, colors, and shapes. They actually look very nice.” Said Chairman Chen pointing at the fence made with the renewable wood outside of the meeting room. The fence does showcase more varieties and is more appealing compared to solid wood.

“More importantly, these renewed wood materials can be recycled. There will not be any waste.” Chairman Chen continues, “In the past, product lifecycle was from cradle to the grave; renewable wood has a lifecycle from cradle to cradle, and we can use less of earth’s limited resources.” But some consumers think that, since these products are made of recycled materials, shouldn’t they be cheaper? Regarding this, Chairman Chen was rather sentimental. “Many performance sportswear use recycled PE bottles, why do they still cost so much? The value lies in the technology. Same thing for renewed green building materials. Seven or eight years ago, we still had much barriers and difficulties in the production process. But Taiwan truly is good in terms of technology. After ITRI’s relentless R&D, now the quality and stability of renewed wood materials are very good.” He further adds, “As long as the consumers use more renewed green building materials, with more demand, the price will natural go down. In fact, even if you pay more money for these materials, you can think of it as paying for protecting the environment on earth.” Chairman Chen believes that this is a virtuous cycle. “When we stop hurting the earth, people living here will be better; when people become better, environment will not deteriorate.”

In addition to importing and retailing all kinds of quality building materials, Chairman Chen also practices what he preaches. When he goes to Taipei for meetings, he rides THSR, and transfers to MRT or bus; he walks whenever and wherever possible. “Sometimes I go walking in the park, and when I see people smoking, I will try to persuade them not to.” Not only that, when he goes to a friend’s house or other institution, he always wants to share how to save energy: “You can effectively reduce the indoor temperature by using insulation, and reduce power consumption of AC. Also, use water-saving toilets, if a person saves one liter of water a day, a family of four saves four liters a day. That is 1460 liters a year. An if it is an entire community...”

Start with yourself, and when more people join to protect the environment, and more people use green building materials, earth will have a future. We will have a future. This is perhaps what green building material evangelist Chairman Chen Tung-Ching wants to see the most.



Quality Green Building Material Products by Sanyeu

Feather – Renewed Wood

Made with 50% recycled plastic, 40% recycled pine powder, and 10% UV absorbing high-endurance paint. Fireproof, pest-proof, slip-proof, anticorrosive, withstands acidity and alkalinity, and does not crack. Suitable as wall façade, railings, fence, chairs, flower shelf, and pavilions. Combine with tiles and solar lights for more variations.

Feather – Breathable Brick

Humidity regulating materials made from natural minerals are evenly distributed in the bricks. Dehumidifies, deodorizes, and absorbs hazardous materials such as formaldehyde. Comes in 300 mm x 300 mm x 7 mm; there are also a mosaic series that features the combination of various sizes.

Nano Paint

Formaldehyde-free, lead and mercury free, non-toxic, and odorless. Low TVOC, releases negative ions to purify air. Photo catalyst prevents growth of mold. Easy to clean, reflects UV, and good weatherability.



Sanyeu Building Material Co.,Ltd.

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Champion Building Materials

Possibility of Happiness



Champion QC Department Fan Cheng-Shen



A small detail tells the whole picture. Sometimes, you can tell a company's spirit and quality from a small place, such as the cup of refreshing winter gourd tea in front of us in Champion Green Vision.

“Winter gourd tea is a refreshing drink. It gets very hot when firing ceramic tiles, so early on we gave employees winter gourd tea.” Said Marketing Department senior officer Lo Kuei-Lan. Nowadays there are water coolers, but the tradition of drinking winter gourd tea is preserved, becoming a treat to visiting guests. This company develops through this kind of delicate thoughts to establish a brand worthy of its name, Champion. Champion is not only the leader in tile industry in Taiwan, developing Asia's very first polished porcelain tile, it is also the first tile company in Taiwan to receive Environmental Label and Recycling Green Building Material Label, as well as the only local company to obtain EU Ecolabel. Champion is the first tile company in the world to pass BSI PAS 2050 Carbon Footprint Verification. All these came from a chairman who values environmental protection.

“You will not see paper cups here at our company. People bring their own cups to meetings.” Even the chairman brings his own cups around. The company has rules such as when to turn on the AC in the summer, that both sides of paper should be used, and always turn off the light when leaving...etc. Trees cannot be randomly cut down in order to maintain diversity. Therefore, company headquarters in Miaoli has achieved Green Building Gold Certification, and Champion Green Vision achieved Green Building Silver Certification, the Zhaoqiao Plant is honored with Green Factory Certification. Actually, Champion's eco-friendly concept is manifested through every thing, even when they establish overseas factories they have reduction of carbon footprint as the top priority. They establish factories near raw material supplies, and follow the standards of green factory of Taiwan, investing nearly four times more than competitors to establish the factories. “Our factory in Penglai, Shandong, is in a vineyard!” Grapes that are used for wine have high requirements for soil and environment, and having a factory here, Champion must have invested much effort and resources to ensure minimum impact to the environment. Not to mention that Champion uses the wine as gifts to guests.

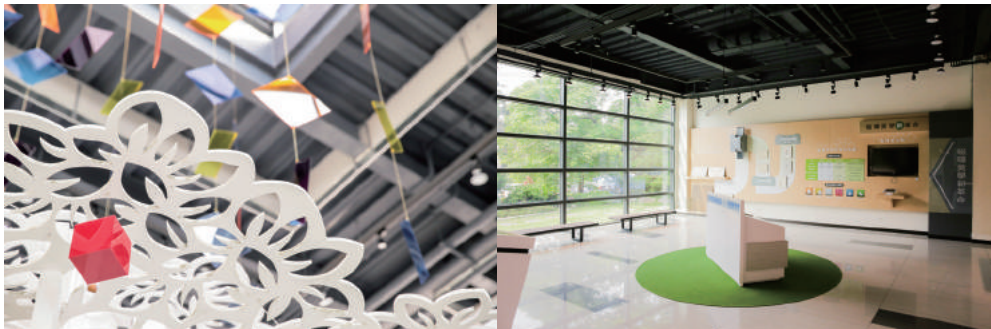
A company like this will obviously be dedicated to developing green building materials, and Champion is currently the first tile company in Taiwan to launch recycling green building materials. Recycling green building material needs to consist of over 15% of recycled



materials. “Usually we use recycled waste materials and broken tiles. We discussed with related departments about adding the materials from pollution prevention facilities, increasing the ratio of recycled materials to 16%-25%.” This not only resolves the issue of recycled materials, but also further meet the principles of Reduce, Reuse, and Recycle.

Although wastewater processing plant is very costly, but the company has valued environmental and social corporate responsibilities since the founder first founded Champion, and believes that this is its calling. Quality Control executive Fan Cheng-Shen said: “We recycled the hot wind produced from the kilns, and use it for powdering and drying to save energy. We insist on using the more expensive natural gas rather than heavy fuel that causes pollution.” After years of implementing these eco-friendly policies, carbon emissions reduced by Champion over the years is equivalent to the amount absorbed by eight Daan Forest Parks; that is about five thousand trees planted annually. Champion has also saved over 1,500 standard swimming pools of water. Impressive achievements. And the green building materials have won the hearts of consumers with great qualities, and share of sales has increased from 7% in the first year to 25%. “Many construction companies market their projects by listing Champion recycling green building materials as a feature!” With great quality, outstanding aftersales services, and 15-year warrantee for household products, houses that use Champion tiles are very popular now.

“Tile is a product that takes time to reveal its true colors.” Said Lo Kuei-Lan, “Someone used imported polished tiles recommended by designer, and after only six months the surface goes cloudy, and then they found out that it was illegally imported form southeast Asia and





Africa.” Bad tiles discolor and warpage, and it takes effort and money to fix them. No wonder Champion is the number one brand.

Not just the consumers love Champion, to Champion’s employees, this is a company where they enjoy safety and security at work. The owner shows his care for them in all aspects. For birthday parties, there are cake, gift coupons, and lucky draw. “In the past, the owner wrote birthday cards to those who were having birthdays.” Also, the company has set up a zero-disaster bonus; from the moment you step out of your home, travel to work and return home, if you accumulate enough hours without being involved in any accidents, on the road or at work, you get the bonus. This is to encourage employees to beware of own safety. Needless to mention that the company provides the most optimal working environment, as it strives to minimize noises and dust. It is truly safe to work for such a company.

This thoughtfulness is extended beyond the walls of the company. Over the years, Champion has taken concrete actions to go to places and serve people that are most in need, contributing to charity works. Launched since 1996, Champion has been involved in charity works and donating money to the less privileged with the “One Dollar Tile for Love” campaign, where Champion donating one dollar for each case of tiles sold, accumulating over 100 million NTD. Through concrete actions, Champion helps out minority groups and students from less fortunate families, hoping to lead by example and generate social awareness.

From taking care of its employees and consumers, to caring for those in need, what Champion strives to pursue is perhaps the possibility of a happy corporation, or even a happy society.

Quality Green Building Material Products by Champion

Green Building Material Series (Gres Porcelain, Stoneware – Floor Tile, Wall Tile, Light Façade Tile)

Using a certain ratio of recycled materials to contribute to environmental protection.

Healthy Aerobic Brick

With “vitamins in air” negative ions added, turning home into forest.

Nano-Anti-Bacterial Tiles

Photo catalyst absorbs sunlight to trigger the self-cleaning and anti-dirt functions of the tile. The active oxygen on the surface is also antibacterial. The texture and color of natural stone make it suitable as wall tile.

Nano-Self-Cleaning Tiles

Nano grade silver ion is mixed with glaze, and through silver ion, and oxidation and reduction, the tiles are made antibacterial. Suitable for kitchen, restaurant, bathroom, and hospital.

Digital Ink-Jet Printing Series

Using digital ink-jet printing to create all kinds of images and realistic patterns, such as wood pattern, such as natural stone material or fair faced concrete.

Wood Tiles

The realistic wood pattern is natural and primitive, featuring rich and swift lines. Anti-friction, waterproof, pest-proof, and contains no formaldehyde. Fire retardant and anti-corrosive. Easy to take care of, and in general, the wood tiles are highly economical; therefore, more and more consumers are choosing the wood tiles to create natural and comfortable living environment.

Champion Marble Tiles

With state-of-the-art technology that saves energy, reduces carbon emissions, and protects environment, Champion fuses home renovation and natural beauty into one. Creating durability through firing at 1,200-degree high temperature and adopting high-tech ink-jet printing, Champion creates highly realistic stone tiles with unparalleled shiny texture and polished glaze surface. Home renovation now is ageless like the natural world, and manifests the glory of the Magnificent rocks.



Champion Building Materials Co., Ltd.

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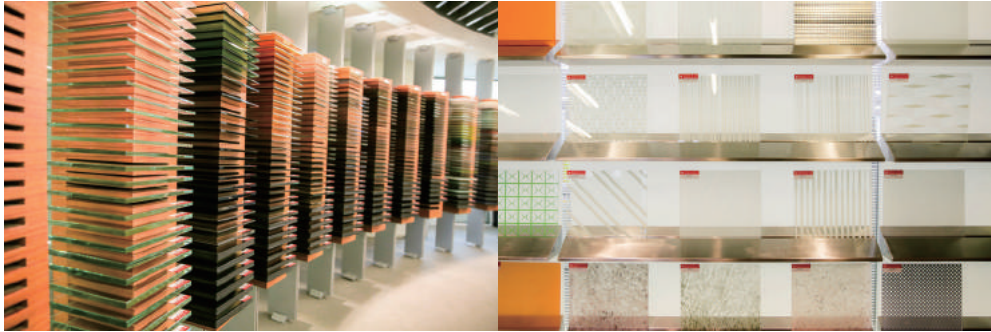
Telephone : 886-37-583775 www.champion.com.tw/champion_tile/



Taiwan Glass

Endeavour for Energy Saving,
Honour All Clients





As the only glass manufacturer in Taiwan, it has been 52 years since Taiwan Glass was founded. The company has many factories in both Taiwan and China, and has become the fifth largest glass company in the world in terms of production capacity. The successful mode of Taiwan Glass was pretty much set by founder Mr. Lin Yu-Chia. A senior executive remembers: “Founder Lin had many business ideals, which have been followed until now. For example he emphasized efficiency, and asked us to use our brains when solving problems. When a proposal produces results, he would reward us.”

Performance is the goal pursued by all companies, but Taiwan Glass also puts much emphasis on social and environmental responsibilities. In the past, many of Taiwan’s rivers were heavily polluted, and the air quality was deteriorating as the result of industrialization. Today, environmental protection is a universal value, and under the government’s demand, companies have worked hard to improve the environment. Taiwan Glass, led by Founder Lin, had already been headed in the direction of environmental protection and energy conservation, and was years ahead of its competitors in this regard.

As for wastewater processing, Taiwan Glass is capable of processing about 80% of its wastewater; however, there remains the problem of air pollution resulted from high-temperature burning in the manufacturing process. Nonetheless, Taiwan Glass strictly follows the regulation requirements set by the government . To construct environmental protection related facilities, implement environmental management system, and educate employees, in order to meet regulation requirements, reduce impact on environment, and achieve the goal of environmental sustainability, Taiwan Glass spent 220 million NTD in the area of environmental protection in 2014 alone, which was a 33% increased compared to 2013. A senior executive said, “We adopt the 7S implementation plan (classification, reorganization, clean, sweep, literacy, safety, and savings). We must carry out garbage classification and paper recycling and so on. These are all part of performance review.” Partner companies in the area of environmental works have related accreditation standards as well.

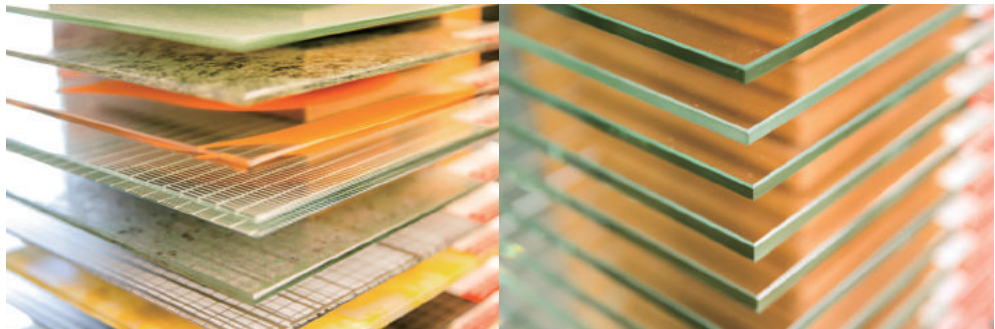
As for energy conservation, Taiwan Glass has enhanced energy efficiency by introducing energy saving technology and implementing energy management, and established index and management procedures regarding all raw materials, power consumption, water consumption, waste water generation, wastes generation, greenhouse gas emissions, and production

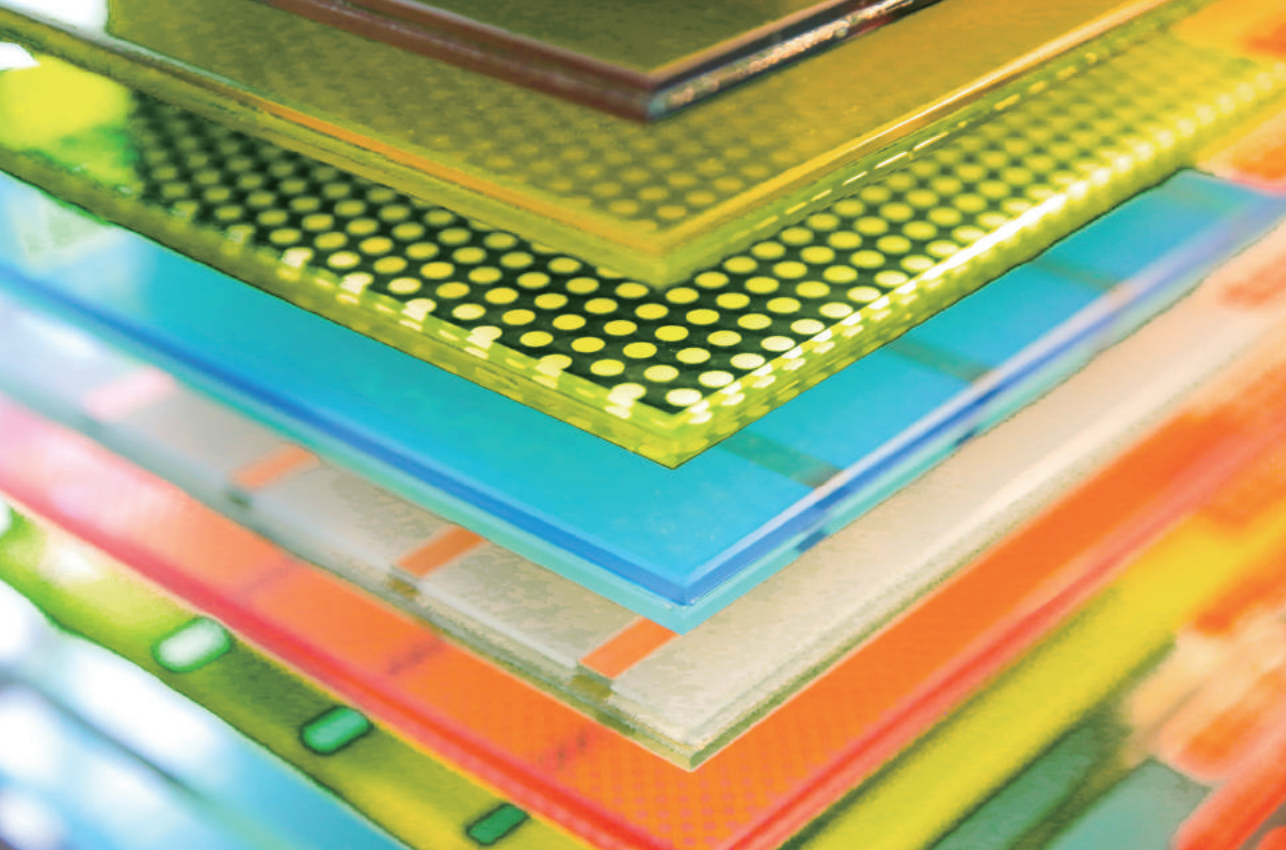


energy consumption, to effectively improve pollution prevention, reduce production energy consumption, decrease greenhouse gas emissions, ultimately achieving energy saving and waste reduction, and minimizing the impact of manufacturing processes and products on the environment. “We use products that have Water Saving Label, such as water saving faucet. We also emphasize green procurement, and we use energy saving light tubes and refrigerators. Our goal is to reduce energy consumption by 1% annually.” As for raw materials, Taiwan Glass uses about 80% raw materials and cullet for the rest to not only lower the cost, but also achieve environmental protection through recycled materials.

Among these policies, the most important would be the R&D of energy saving products. The Low-E (low-emissivity) Glass that has won the Green Building Material Label is on such prided product. Using the up to date vacuum sputtering coating technology and equipment from Germany, multiple layers of coating of different materials are sputtered onto the glass surface; the silver coating has a high reflectivity of infrared, which means high thermal-resistance. The base coating below silver coating is tin dioxide (SnO_2) anti-reflection coating, which enhances visible light transmission(V.T.). The layer above the silver coating is nickel-chromium(NiCr), an insulation coating that protects the layer of silver. At the top is another layer of tin dioxide anti-reflection coating that protects all layers. These coatings collectively achieve the requirements for high V.T., low visible light reflection(V.R.), high heat-insulation, and environmental and energy saving most concerned by modern architecture.

“For example, the Taoyuan International Airport phase II used the Low-E Glass for its high V.T.. It brightens the interior, but reflects almost all the infrared and reduces the temperature





inside, allowing the interior to be cool in the summer and warm in the winter. It is estimated that it helps to save about 40% of electricity cost.” This is an astonishing result. Now that greenhouse effect is becoming more severe, and the summer is getting hotter and hotter, it is a good idea to install Low-E Glass. Other buildings, such as CTBC Bank, and Fubon Taichung Wuchun Housing have all use this kind of energy saving glass.

Compared to imported glasses, Taiwan Glass has the advantage of being the local producer; not only the price and timely delivery, the quality is first-rate compared to foreign products, and the most important thing is service. “We are customer-oriented.” Said the senior executive, “In normal construction project, most of the time the glasses are produced after the window frame is certain. It is a custom-made service; customers bring up the needs, and we provide technical and production services. There are lots of details within. For example, one project over 500 sizes in 2,000 pieces of glass.” This is something glass importers cannot provide, but Taiwan Glass is the best friend of architects for above affairs. Whether it is V.T., color, curved curtain wall, or structural glass system, Taiwan Glass make the most effort to provide the best solutions.

The show room of Taiwan Glass display glasses with various patterns jointly created by Taiwan Glass and clients. These beautiful achievements are the very manifestations of Taiwan Glass’s “customer-oriented” philosophy, as well as the proof of its industry-leading status.

Quality Green Building Material Products by Taiwan Glass

Low-E Glass

Award of Green Building Material Label, the glass has natural glass color, and high visible light transmission for wavelengths from 380 to 780 nm. result in decreased use of indoor lighting and help to save energy. Will not cause glare hazard due to high visible light reflectivity. High reflectivity of long-wavelength infrared light, prevents heat entering the room, keeping the room cool in the summer and warm in the winter.

Low-E Vacuum Glass

Low U value (heat transfer coefficient) effectively block solar heat, keeping interior cool and reducing power consumption for air conditioning. In the winter, possess high performance of heat loss insulation, keeping interior warm and comfortable. The U value has been tested by CTC China Building Material Test and Certification Center, and the low U value achieves the highest class of heat insulation standards in Mainland China and Japan. The vacuum space effectively blocks noise transmission and reaches sound transmission class by 39dB. The lowest condensation temperature is at -40°C without inner dew-forming situation. The service life can reach over 20 years. Also, the thickness is much thinner, which saves window frame cost.

Insulating Glass

Great insulation effect, and if inert gas is used, the insulation effect can be much better. An ideal energy saving building material. The middle layer is dry gas, which prevents dew-formation.



TAIWAN GLASS IND.CORP

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Projects using energy saving glass of Taiwan Glass



Cathay Landmark
Low-E IGU



Fubon Taichung
Wuchun Housing
Low-E IGU



Chi Mei Hospital-Forth
Medical Building
Low-E Vacuum Glass



CTBC Bank
Low-E IGU



Taipei Marriott Hotel
Low-E IGU

Perma Enterprise

Problem-Solving Expert



PERMA president Robert Sun(right)PERMA International Sales Department manager Grace Sun(left)



Perma is a modest, honest, and streamlined company. From owner to employees, every one wears uniform to work. Perma has over forty employees, who make good use of time during official eight hours working time and do not work overtime or engage in excessive customer business party after work.; Perma adopted five-day working week policy even before official implementation by the government. What is the key for Perma to achieve profit growth even during global recession? The answer is its ability to problem solving.

President Robert Sun recalled his fateful encounter with adhesives before founding the company: “At the time, a Swedish engineer at the company I worked used this (adhesive) to quickly fix a broken pipe. It was amazing. Having always wanted to start my own business, I though I should really introduce such wonderful adhesive to Taiwan.” In the beginning, the adhesive was imported in small batches. President Sun set strict daily sales goals, and would not rest before he reached them. So just like this, taking things a step at a time, President Sun worked hard and visited potential businesses and companies that used adhesives. Over thirty years ago, it was rare for college graduate to be a salesman. “When I demonstrated how to use the product, many questions were asked. To solve their problems, I had to look for answers.” Every problem he solved, he gained more knowledge to another product, and gradually, Perma became an adhesive expert that accumulated great reputation through outstanding technical services.

By the seventh year, Perma aimed to explore blue ocean, and imported from Japan products of more advanced technology and greater value-added, in order to solve more complex problems of clients. Later on, Perma established technical cooperation partnership with Japanese company and set up a factory in Taiwan, and has since embarked on a journey of R&D and manufacturing, while also insisting on green manufacturing process. “My first job was in Nanzi, Kaohsiung. Every day I went to work, there would be a layer of dark ash and dust on my desk; air quality was very bad, and I thought that it was not a place to stay for too long. I quitte after a few months.” President Sun was profoundly affected by that memory, and does not want to have anything to do with products that are toxic or will cause pollutions. “This is about my conscience!” Coming from a chemical engineering background, President Sun understands that the chemical engineering industry plays a large role in environmental pollutions. He loves nature, and does not want his company to play a role in the destruction of environment and health, and that is why he has always paid much attention to materials and manufacturing process. “At our company, we use water for whatever that can be washed with water during the manufacturing process; or we use soap water. Sometimes when we need a solution, we use edible alcohol. We do not try to cut down the cost and be stringy. Some people use methanol, which is not good to human body. Although it costs six times more, but we insist on purchasing 95% edible alcohol



from Taisugar. Sometimes I even joke with my employees and warn them not to drink the alcohol.”

To President Sun, having faith in what you do and always giving your best is important . This is why he never asks his employees to work overtime. “Eight hours a day is plenty enough to get work done if you make good use of your time. Besides work, you need another eight hours to sleep and leave another eight hours to yourself which you may study or spend time with families and friends. Don’t you think it is too much to take sleep and personal time to work? If our people have difficulty in finishing work in time, I will make adjustment to ensure he or she received help and the problem is solved” The reason for not spending excessive time throwing business party to please customers is even more straightforward: “If your product is not good, it is not good; it is not like you can drink more glasses of wine and get the client to buy it. At Perma, we do business with integrity.” As for the company’s policy of five-day week, “Well, it is because I need to rest too. I think it’s better to lead by example. Work hard when it is time to work, and relax when it is time to take a break.”

At Perma, every one shares the same belief: anything that should be done, do it right from the very first step. “It is like when a typhoon hits, you should stay home and take care of your family; Typhoon safety precaution should be done carefully beforehand in the company and when typhoon hits, what happens, happens. No one should be forced to come and check on the office, my people’s safety is the of utmost important and should not be put at risk. This shows President Sun’s philosophy of governance, and also explains the birth and promotion of its “Modified Silicone Sealant” series, which was the first sealant to be awarded the Green Building Material recognition.





Silicone has a wide range of application; however, when it is exposed to outdoor environment, it goes through certain changes. Especially, when it is used on the exterior of a building, after exposing to natural elements, silicone oil will release and contaminate the surface of substrates and the oil released will attract dust; the rain will then wash the dirt off the surface and cause the dark stains all over the façade. This is the reason why most of the buildings in Taiwan look dirty and dusty only a few years after they are built. At first, Perma only developed traditional silicone adhesives, but they realized that Japanese buildings are all clean when the company participated in a trade fair overseas. Grace Sun, head of International Sales Department, said: “Their (Japanese) buildings look clean, and you don’t see people cleaning the exterior wall and façade of the buildings all the time; after all, labor cost is high in Japan. Later we found out that the sealant they used is the key to clean exterior.”

So Perma took a few years to research and study the sealant for exterior wall, introduced successful and advanced technology from overseas, and then made adjustments and improvements in accordance to Taiwan’s environment and climate. It took the company nearly three years to finally succeed. “At the time, Taiwanese market of this type of silicone was dominated by foreign products, and they were expensive. Our product was relatively more affordable, and it passed all the tests and was certified as green building material.” Said President Sun. Because Perma was the first company to submit an application, they had to spend millions of dollars for the tests and inspections. They did almost all the necessary tests and passed all of them.

“At first when we tried to break into the market, we sent out free Modified Silicone Sealant to developers, wanting to find out the true effect of the product. This developer had never used our product before, so he went back to the building every year to check on it. One, two, and three years later, he found out that the effect was good, and had since used our product. Modified Silicone Sealant not only is stain-resistant, it is also earthquake-proof and fireproof. Some other products are not as flexible, and crack easily after an earthquake, which will lead to leaking.” Tried, tested, and true, Perma’s Modified Silicone Sealant has gained great reputation among developers with its high quality and affordable price; many high-end development projects used the product, and used it for marketing.

“Using the right product in the beginning will save you lots of troubles later on. You don’t need to wash the building as often, and if you calculate those costs on water, detergent, and workers, you actually save a lot of money, and it is environmental friendly.” President Sun believes that one should always look further down the road, just like at Perma, they not only produce industrial, everyday, and architectural adhesives, they have also ventured into the bio-tech industry. Perhaps in the near future, we can see Perma manufacturing adhesives for medical uses!

Quality Green Building Material Products by Perma

Modified Silicone Sealant Series—flexible organic exterior tile adhesive, pollution-free MS silicone sealant

certified Green Building Material, and conforms to EU RoHS Directive, UL Flame Retarded Test, SGS, and Heavy Metal Content Restriction. Solves the problems of sealant pollution and falling of exterior tiles. Safe, beautiful, and paint applicable.

Perma Cement Do-It-Yourself Series

Certified Green Building Material, and conforms to EU RoHS Directive, UL Flame Retarded Test, SGS, and Heavy Metal Content Restriction. The series includes various kinds of instant glue, hot melt glue, and epoxy putty, and is perfect for DIY home repairs.



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Yung Chi Paint & Varnish MFG Co., Ltd.

Paints of Love



YUNG CHI Marketing manager Dennis Chang



The name Yung Chi may not ring a bell, but everyone recognizes the brand Rainbow Paints. This is a popular brand in the architecture industry, the love of painters. Even for general consumers, they usually opt for Rainbow Paints when they carry out home makeover on their own. Not only is Yung Chi the only paint company that has gone public, internationally Yung Chi is also among the top fifty paint companies in terms of sales. However, these results were only achieved after the company carried out proactive transformation in response to its initial failure establishing factories overseas.

In fact, Yung Chi has a 65-year history, and is famed for its unparalleled quality and continuous strive for excellence, becoming a pillar in Taiwan's paint industry and the company with the largest market share. "However, in 2000, we went to Kunshan to build a new plant. We were facing competition from European, American, and Japanese major players, and it made us think." Recalled a Yung Chi executive. "With chemical background and own formula, everyone can manufacture paints. So what was our value?" With this question in mind Yung Chi launched a full-front upgrade of its products, price, and brand, attempting to produce more exclusive products while also lowering the prices. Originally Yung Chi had focused on the construction industry, but it also expanded its scope to include the general consumers.

Yung Chi remains proud of the development of its fireproof paint. "Before we launched the fireproof paint, we could only purchase from overseas. One ton of fireproof paint cost as much as one ton of steel. If you spend 400 millions buying steel to build a plant, you need to spend another 400 millions on fireproof paint." This was too costly for many companies. It took Yung Chi six years, investing dozens of millions, to finally develop its own fireproof paint.

Fireproof paint imported from overseas had no rivals before that, and the seller always had the last word regarding the price. So it sent a shockwave around the industry when Yung Chi first launched its own fireproof paint. "We reduced the price of a barrel of fireproof paint from 20,000 to 3,000." And consequently, foreign vendors began to reduce their prices. "So we had to work even harder. Maintaining the existing functions, we wanted to make fireproof

paint thinner, and simplify the procedure, so that cost can be further reduced.” Competition drives progression, and this was the lesson Yung Chi learned when it first ventured into the international market. Today, many Taiwanese technology companies, such as TSMC, AUO, and Chimei, are all using Yung Chi’s environmental-friendly fireproof paint, and this is the very manifestation of the company’s strength.

Another prided jewel of Yung Chi is the Rainbow All-in 1 Emulsion Paint, which is referred to as charity work. This is the display of the love of parents. “I have my own children, and when they were learning to walk, their hands were usually touching the wall for support. Then they went to grab something to eat. I was very worried. What if the chemicals in the paint were eaten by my children?”

With this concern, the executive wanted to develop a completely harmless paint. So Yung Chi mobilized all divisions; from market research, discussion with R&D, and partnership and cooperation, it took two years to finally launch this “purest paint achievable by current technology.” The executive said, “I demanded that this paint does not contain environmental hormones, no hazardous heavy metals such as formaldehyde, and no added fragrance.” In general, paint releases odor because of the excessive monomers produced through the manufacturing process. Many paint companies add artificial fragrances to cover the odor. All the added fragrances are artificial, and Yung Chi did not want them in its product, so it spent much effort and resources to finally develop exclusive environmental-friendly technology to remove the odor of excessive monomers. With no odor, and no hazardous materials, the executive at Yung Chi’s describes the product in a rather intriguing way: “The biggest trait of this emulsion paint is that it has no traits.”

Yung Chi also put in much thought on the packaging of the product. Since the product’s main claim is impact-free, so the bucket features a different look compared to other products in the market, adopting a lighter and rounded design. “I hope to visually convey a certain quality, and even the handle is specially designed. The width matches the second section of the finger, so it doesn’t feel as heavy, making it easier when you go to work.”

During testing, they asked many contractors and painters to use the paint in different ways on different materials. After continued adjustment and improvement, this paint became





the top choice of many painters in a number of blind tests. It was this dedication to details that this emulsion paint took the industry by storm shortly after it was launched.

Actually, Yung Chi has many popular products, and all these products were developed with thoughtful intentions and consideration of demand. “Have you thought about writing and drawing on the wall? Have you thought about putting magnets on the wall?” True, many children love to draw on the wall, but they often get scolded. Now this is no longer a concern. The “Three Treasures of Yung Chi,” Rainbow Water Based Whiteboard Paint, Rainbow Water Based Chalkboard Paint, and Rainbow Water Based Magnetic Paint, are paints that allow people to showcase their creativities on the wall. Whether it is drawing or leaving a message, these paints are truly convenient. All the writings and drawings can be easily removed, and leave no trace. You only need to apply a few extra layers of the magnetic paint, you will be able to put your magnets on, or decorate your wall with pictures. This is very convenient, and no wonder these paints have become bestselling products.

All Yung Chi’s paints respond to aspects of the industry and life. “Other than airplanes and cars, we currently have all the paints for all the needs.” Whether it is industrial or architectural needs, living and home decoration, the one thing shared by Yung Chi’s countless products is the dedication it puts in. Just like the fireproof paint that has saved millions for local companies, or the All-in 1 Emulsion Paint that safeguards our health, Yun Chi produces all products as if they were making them for own use. Yung Chi is really making paints of love.

Quality Green Building Material Products by Yung Chi

Rainbow All-in 1 Emulsion Paint

Using top quality purified resin, and exclusive DETEXMO technology, Yung Chi minimizes foul odor and adds no artificial fragrance. No impact or pollution to the environment or human body.

Contains breathable anti-mold factor, the product has passed the JIS Z 2801 Antibacterial test and the highest 0 level of JIS Z 2911 test, capable of preventing the growth of various bacteria in humid environment.

Contains no heavy metals such as formaldehyde, lead, and mercury. Dustproof and dirt-proof, and withstands over 30,000 washes. Durable formula prevents discoloration and dulling. Computerized paint color mixing system satisfies all styles and design.

Rainbow Easy Clean Emulsion Paint

Contains Dupont Teflon surface protector, prevents dirt and dust from adhering to the wall, making it easy to clean. The paint film has high elasticity to prevent crackling. Passed antibacterial and anti-mold tests. Contains no heavy metals such as formaldehyde, lead, and mercury.

Rainbow 450 Water Based Cement Paint

Signature product of Yung Chi. Received Environmental Label and Healthy Green Building Material Label. The strongest hiding power in the industry. The product can be applied to a large area, making construction easy and convenient.



經典色 / 米白



經典色 / 午光



經典色 / 青瓦



YUNG CHI PAINT&VARNISH MFG CO.,LTD

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Mega Master Technology Co., Ltd

Ethical Company fully devoted
to its Clients



良瑋集團 良濤集團
泉碩科技股份有限公司



Mega Master President Sean Yu



Rarely are people not impressed by what they see when they enter Mega Master Technology. Dozens of old trees thrive along the perimeter of the company complex. Upon taking a closer look, people will find that all these trees are at least sixty or seventy years old, and there is one star fruit tree that has lived for over a century. Most of these trees have been transplanted here due to land development. Among the greenery, there are a number of giant rocks of different materials placed on platforms. The landscape garden at the company complex is full of elegance, and this is only the beginning.

Upon entering the main building, most people will be left in awe as soon as the elevator door opens: “Is this an office or a museum?” Solemn statues of Buddha are placed in different areas, and the space also features a few dozen Chinese ink paintings, oil paintings, and large wooden cabinets and furniture displaying intricate decorative patterns from the owner’s very own collection. There is also a Buddhist worship room of substantial scale. All of these have shocked visitors to the company.

“Many clients, after seeing our environment, feel that such a company is trustworthy, and often place orders quickly,” said the owner, a devoted Buddhist believer. “In fact, living in this world is a responsibility and duty, as nothing is real. You can take nothing with you when you leave this world, and the only legacy you leave behind is your actions.” Therefore, to him, founding Mega Master Technology is to set an example: “we only use environmentally friendly raw materials to produce harmless products in aim to create a green lifestyle with no pollutions and mitigate human impact on the environment.”

Mega Master Technology’s environment-friendly PE foam features exclusive electronic bridge technology, and is nontoxic and highly stable compared to conventional PU and PS products that are chemically bridged. “In the beginning, the insulation effect may be relatively similar, but after about two years, normal PU and PS foams will absorb water, which greatly reduces their heat transfer coefficients. This will result in disintegration of the foam. However, Mega Master Technology’s eFoam do not have this problem,” explains President Yu. Electron beam bridging achieves a consistency nearly comparable to nanotechnology, and therefore, quality will not be compromised over time.

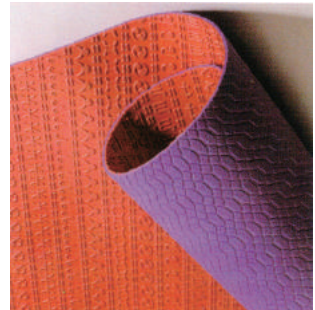
There is a wide range of applications for eFoam, Mega Master Technology’s products, consumer products including adhesive tape, automotive tape, and medical tape and pad, or building materials such as soundproofing materials, roof insulation, and wire insulation, have



all passed biocompatibility test, allergy test, and food grade test, and they do not contain hazardous materials such as heavy metals and bridging agents, as we do not lower our standards for products of different functions. “We hope that, from manufacturing, processing, to using, we can better safeguard the health of everyone that comes into contact with our products, so we can contribute to the earth and its inhabitants. Everyone in the company is trying to do more good deeds for their own good.” As Buddhists believe, “create no evil, cultivate all good;” to Mega Master Technology’s owner, who is a devoted Buddhist believer, knowledge and action should go hand in hand, and it is most important to practice what one preaches.

In addition to such sincere intention, there are other factors contributing to Mega Master Technology’s growth in capacity, which, within ten years, has become one of the top three in the world. First, independent R&D capability; every year, Mega Master Technology invests at least 1 million USD to carry out joint research and development with related institutions. Second, clients’ trust; Mega Master Technology has established long-term relationships with almost all its clients, and achieves high level of client loyalty through customized services. “I can make products in accordance to client specifications, such as width and thickness. By producing the products through continuous rolling, we are able to reduce loss and waste due to undesired width and length of other materials. The most important thing is quality, as it does not change with variations of formula. We reject all products and make no compromise if the client finds them unacceptable,” further explained President Yo. “And our products have the lowest prices compared to others in the same category. With our aftersales services, we aim to position Mega Master Technology as having ‘Japanese quality, Chinese cost, and Taiwanese services.’”

Another important reason for Mega Master Technology to remain competitive is its self-designed production line. “Many companies buy an entire set of production facilities, but we



have very capable construction and R&D teams, and they divide up the production line into zones; different zones work with different clients, utilizing their strengths to form a production line that is the most efficient and achieves the highest quality.” President Yo remembers that they had taken a machine fully apart before, and it is this experimental spirit that Mega Master Technology’s professional engineers and technicians have thorough understanding on machines from different countries, and thus they are able to put together the most powerful and unique production line. “Our facilities came from Japan, South Korea, and Taiwan, but after combining and modifying them, we are able to effectively lower costs; for example, we reduced labor cost by half. Other companies that have purchased the same machines, they lack our professional experience in pairing the machines, and thus they cannot compete with us by simply copy what we are doing.” No wonder after a fire that burned down the office at the factory a few years ago, which compromised Mega Master Technology’s unparalleled productivity, the price of foam increased by 30%.



It is not just Mega Master Technology’s productivity that is proactive and flexible, the company also has great vision regarding future deployment. “For example, shoemaking materials, where price competition with traditional foam is inevitable, but some companies are unwilling to sacrifice profit. However, with our efforts in technology, price, and services, I have successfully introduced eFoam to sports goods manufacturing and shoemaking.” Furthermore, Mega Master Technology has developed foam play mats for children. Presents need to only download the app, and their children can learn English while playing on the nontoxic and safe floor mat.

When we finished the visit and were about to leave, we saw a poster at the entrance that left quite a lingering impression. “Actually, the old ones posted by an old shareholder read ‘Companies that do not make money are evil,’ a phrase famously said by Matsushita Konosuke. My father was angry when he saw them, and ordered them torn down, changing to this one written by himself.” The new slogan now reads: “Factory is where you practice Buddhism, products are the sweet dew, colleagues are fellow practitioners, and clients are bodhisattvas.” This is Mega Master Technology, a company that is fully devoted to realize Buddhist teaching in life, an honest and ethical company.





Quality Green Building Material Products by Mega Master Technology

Green building materials and thermal insulation materials

no toxic additive, thermal and sound insulating, energy saving, withstands freezing climate and does not dissolve, suitable for temperature as high as 120 degrees Celsius. UV-proof and highly drug resistant. Delicate and light on both sides, high shock absorbance. Suitable for roof thermal insulation, thermal insulating steel plate, protection tape at parking lots, children safety wall, wood panels, carpet lining and sound insulation, building material, and window seam filling.

For everyday products such as leather accessories, toys and puzzles

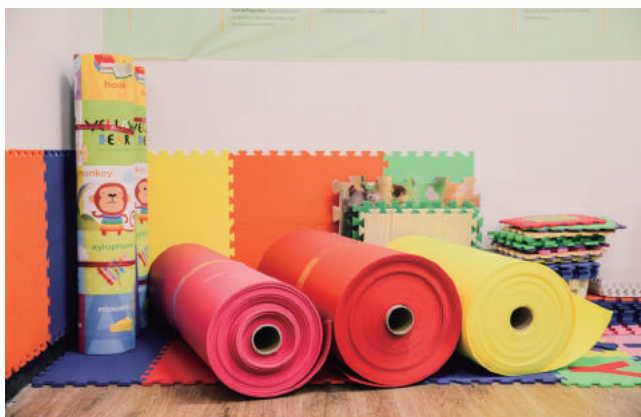
high heat resistance, can be used with cloth adhesive or hot melt adhesive. Comes in a wide range of colors.

Sport guards and buoyancy materials

yoga mat, surfing board surface, and life jacket.

Self-adhesive materials

delicate on both sides, and can be as thin as 0.5mm. 300-600% of elongation. Minimum flatness at 5%. Gasket, sealing material: light and delicate, does not scratch cover, vacuum or thermal forming.



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Sun Rubber Works Co., Ltd

Attitude Determines Everything



Sun Rubber President Chen Shin-Min

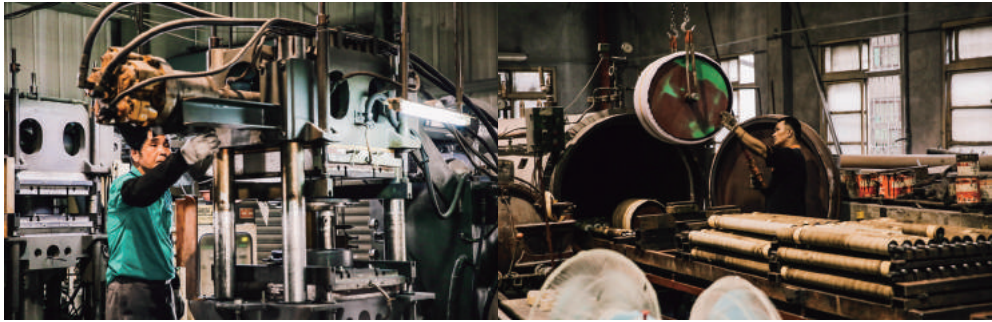


All investors understand one thing, that the owner is one of the key considerations for choosing a target company. The owner's ability, vision, ambition...will determine the fate and future of a company. If we examine Sun Rubber Works President Chen Shin-Min with these criteria, he is undoubtedly one of the top players in the game.

President Chen won the Top Ten Manager honor in 2008 and Taiwan's Top 100 MVP Manager in 2011. In 2012, Sun Rubber Works took home the Industrial Sustainable Excellence Award despite being the "smallest company" in the competition. President Chen is still proud about this achievement.

"I love my job," says President Chen, eyes glittering with passion. "It is a fortunate thing to be able to have your hobby as your job; however, you must constantly learn, observe, and study the trends, and further enhance your expertise." Jokingly referring to himself as a piece of white paper, President Chen had not attended college. After taking over the business from his father, he started from the bottom, and went to seminars and classes whenever he had time. "We did not have high-speed railway back then, and I could only take Kuokuang Bus to Taipei. I went to classes even if they were very expensive." Over thirty years ago, he would go to seminars that cost as much as NTD 3,000, and has attended at least 800 speeches and seminars until now. Not only is he still attending such events, he later went back to school, and is now writing his PhD dissertation.

For President Chen, it is important to continue learning and improve himself. "Competence and the ability to execute are two keys to success." Therefore, even as the second-generation owner, he learned on the job and gained extensive knowledge on all tasks in the company despite having no educational background in mechanical or chemical engineering. He even has a boiler certification. President Chen had stayed in the office and worked until 3 am



and come back in the morning at 8 the next day for an entire week; he had injured his finger so severely that he was almost exempted from military service; he also faced the situation where senior employees resigned collectively. The obstacles along the journey were both challenges and precious lessons, cultivating comprehensively his ability to manage, research and develop, and market, and as the result, he has been able to achieve growth every year after he took over from his father, and reach new heights despite the ups and downs of economy.

Sun Rubber Works produces products for over twenty industries, and has established ties with more than 8,000 clients, and the number continues to grow at a pace of over 1,000 annually. Traditional rubber industry is vulnerable to economic ups and downs, but because of such diversity of products, Sun Rubber Works have no high or slow seasons, and provides clients rapid and timely services. “We deliver the shipment within 3 to 5 days upon receiving the order. The clients will let us know their discontent if it were over ten days.”

Diversity and speed determine Sun Rubber Works’ operation and performance, whereas creativity is the tool that allows Sun Rubber Works to explore different dimensions. Admitting that he is as curious as a cat, President Chen said: “Laziness inspires creativity, and I am always thinking whether there is a better and faster way to do things, or a better product that brings more convenience to consumers.” With this intention, President Chen, who loves to work his brain, and his R&D team have obtained numerous patents in Taiwan, China, U.S., Australia, and Germany. Among these products, the sander wheel known as “Sun Wheel” is a revolutionary product. Sun Rubber Works has changed the material of sander wheel from aluminum alloy to engineering plastic, and the production method to injection formation. This patented product has enabled Sun Rubber Works to transform from an OEM into an ODM with own brand, becoming the market leader in Taiwan, China, and Southeast Asia.

Another product, green plate, which is praised by National Taiwan University professor as “a great contribution to mankind,” is a one-of-a-kind innovation. Currently, the product has obtained 15-year patent in Taiwan. President Chen recalls that early on, the scrap materials from production of rollers and corner guards were recycled to make reclaimed rubber, but the process produced strong odor, and people gradually stopped doing it. Sun Rubber Works had to burn carts and carts of scraps. At the time,



he felt wrong seeing the black smoke going up into the blue sky, but did not know what to do. Later, Environmental Protection Administration demanded that scraps be recycled, and waste-processing fee was NTD 4 per kilogram, which was quite a substantial cost for a company that produced great amount of waste material.

“I was thinking how to deal with the waste, a method that would not impact the environment and saves money?” The problem did not slow him down, and under his leadership, the waste materials became Sun Rubber Works’ exclusive product. It took them six years, and dozens of millions in R&D, and President Chen proudly says: “We are the only company in the world that overcame the stickiness of rubber through physical method; each plate is made of two portions of waste rubber and one portion of regrind plastic. In Europe and America, a product is considered environmental-friendly as long as it contains 30% recycled material; in that case, our green plate is 200% environmental-friendly.”

Sun Rubber Works’ green plate with stone pattern is suitable for outdoors. “I position it as a landscape façade material. It is scratch and dirt proof, and with rubber’s low water retention characteristic, there will not be any moss.” President says, “Once I went to the seventh redevelopment zone in Taichung, and I saw many of the luxury villas using our green plate as edge guards!” Another architect used green plate on bathroom floor, because it is slip-proof. These creative ideas also impressed President Chen. Green plate was invented, and now the consumers can be creative with how they use it, and this is what President Chen loves to see. “Our green plate is truly amazing. Some buildings use marble or ceramic tiles for the façades, but they fall off as the cement is eroded off or expands and shrinks due to temperature change. It often causes injuries of people. However, you only need six nails to hold the green plate in place, and it will almost never fall and hit people.” He adds, living up to his reputation as Sun Rubber Works’ “super salesperson.”

Although made from recycled material, the product embodies enormous R&D effort and care for the environment. “I often tell my employees that we are not selling things, but selling a kind of value. For example, for our road safety products, we are selling a value of life, and our green plate is a value of environment.”

“Every person must have his or her belief,” said President Chen, who loves to create marketing slogans for own products, “I had coined the phrase ‘flexibility determines your height’ for our road safety products, and it was quite popular. In the future, I have already come up with another phrase, ‘height determines influence,’ for a suitable product. However, for today’s Sun Rubber Works, I will sum it up as ‘attitude determines everything.’” Yes, Sun Rubber Works’ achievements today are the results of President Chen’s constant learning; he always has a sense of crisis, as he continues walking on this journey of innovating the traditional industry of rubber.





Quality Green Building Material Products by Sun Rubber

Sun Rubber Works Green Plate

Utilizing scrap rubber and high-density PE and customizing molds to manufacture products in accordance to customer needs. Durable, weather resistant, acid and alkali-resistant, and sound and thermal insulation. Through nanotechnology, the product is dust-free and self-cleansing. Allows easy and rapid construction. The product has a wide range of applications, and is suitable for driveway walls, flowerbeds, façade decoration, soundproof material, swimming pool slip-resistant mat, and fabricated houses.



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