PRODUCTS FROM DESIGN TO DELIVERY.











East West Manufacturing is a global manufacturing services company specializing in components, sub-assemblies and finished goods for OEMs and distributors. We are not only industry experts at managing projects from design to delivery, but are also committed to giving our customers the best possible experience by working with dedicated U.S.-based engineering and customer support teams and producing products to world-class standards in an easy, efficient manner.

Beyond our manufacturing specialties and unparalleled knowledge, East West is deeply rooted in a culture of integrity, education and service that can be felt and seen in each division within the company.

We recently expanded our global capabilities to further enhanced our EMS services and gave customers the option to benefit from nearshore manufacturing in Costa Rica. East West's mission is to create products that not only make the world a smarter, healthier and safer place, but cleaner as well, which is why operating in Costa Rica is such a logical fit. The country prides itself on being ecologically focused and is ranked **no.1 in the world for sustainable wellbeing, operating with an astonishing 99% renewable energy. Now that's something we can get behind!

*pictured is Scott Ellyson (top) and Jeff Sweeney (bottom), co-founders of East West Manufacturing *rankings based on the most recent reports from The Happy Planet Index (2016)

DESIGN. MANUFACTURING. DISTRIBUTION.

COMPANY SNAPSHOT



East West is a complete supply chain solution with

LOCATIONS WITH MANUFACTURING OPERATIONS IN

GLOBAL DESTINATIONS

including U.S. based customer support and engineering allowing us to take your product from concept to mass production and delivery with our specialized services in...



DESIGN

Our talented team has experience in all aspects of mechanical and mechanism design including FEA and CFD simulations.

MANUFACTURING

East West is first and foremost a manufacturing company, founded and led by engineers who understand products and their manufacture.

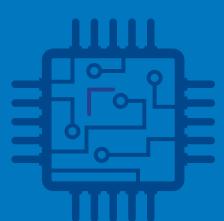


DISTRIBUTION

We are your endto-end logistics solution. We offer warehousing, distribution and cross-docking services for our customers.







ELECTRONICS

Vietnam
Costa Rica
North Carolina

ISO13485 ISO 9001 Low to high mix
Low to high volume
Simple to advanced
complexity

East West offers Surface Mount Technology (SMT) capabilities through our Electronics Manufacturing Services (EMS) division. With four global locations with their own specializations, we are able to manufacture products of any quantity and complexity level. Our multi-building complex in Vietnam has a scalable state-of-the-art, lead-free facility to manufacture printed circuit boards (PCBs) and complete box build assemblies in high volume, low mix. Should our customers require low volume, low complexity runs, one of our facilities in North Carolina are ideal, while mid-volume, high complexity electronics are often best suited in our nearshore Costa Rica factory.

EMS SOLUTIONS FROM THE SIMPLE TO THE HIGHLY COMPLEX

Our team of electrical design engineers assist customers with the design, development, launch and manufacturing of EMS products and electrical control systems with a focus on economy, quality, reliability, safety and sustainability. Some ways our electrical design team can help you:

- Board Layout
- BOM Review
- Alternative component selection
- Design for Manufacturing Analysis and Recommendations
- Design for Assembly Analysis and Recommendations
- Multi-Board/Component System Design
- Functional Board Testing & Analysis
- 3rd party certification compliance
- Prototyping

Our experienced engineering team provides superior solutions for new product development projects including design for manufacturability and design for testability (DFM/DFT). Our lean culture enables continuous improvement efforts ensuring we provide our customers with the lowest "total cost" solution.

East West provides additional processes such as injection molded plastic housing, laser cutting, custom magnetics, cable and wire assembly, or vacuum forming, to complete your electronics project's needs.

4 5

AIR & WATER MOVING SYSTEMS

From AC and EC fan motors, OEM customized fans, blowers and pumps to electronic assemblies and plastic injection molding, East West's expertise allows us to find the best solution for your unique project.

In House Testing

With a UL-approved dynamometer test facility, we're able to perform various testing applications on motors, axial fans and blowers including:

- Airflow testing
- Thermal Shock Testing
- Stop/Start Testing
- Continuous Run Testing
- Locked Rotor Testing

- Acoustic Testing
- Vibration Testing
- Highly Accelerated Life Testing
- Extreme Temperature Testing





EC MOTORS & FANS

East West produces a variety of EC motor ranges between 4 to 30 watts typically used in the HVAC, food service and refrigerations industries.

Our EC motors are manufactured in our ISO 9001:2008 and ISO 13485:2003 certified facility in Vietnam.



ELECTRIC MOTORS

Our modern facility outside Shanghai, China has the flexibility to product high mix, low to mid-volume product and as little as pallet quantity increments. The in-house UL witness facility provides testing expertise and eliminates the time and hassle of shipping your products to other facilities.



PUMPS & BLOWERS

We offer the ability to design custom blowers around existing systems. Some blower assembly applications include water heaters, OEM custom blowers, air purification, HVAC and fitness. We manufacture a variety of pumps for applications including food service, centrifugal pumps, etc...

Performance, Quality & Competitive Pricing

Let East West's motors differentiate your company from the rest of the field. With highly trained and qualified staff of both in-house and third party inspectors, you can be confident that your motors are produced to meet your custom specifications because they are under our watchful eyes in our own factory. Extremely low PPM defect levels for our motors are a result of East West's world-class quality program.

We Understand UL

Our factory has a UL-certified lab which provides speed and expertise for testing your products. You save the time and hassle of having your products shipped off to a UL-testing facility, which could take months for testing to be completed and reviewed. Years of experience with UL have helped our factory manufacture products that will help meet these standards without difficulty.

We strive to make products that will change the world.







RUBBER

Our Vietnam office focuses on rubber products, extruded plastics, industrial textiles, aluminum extrusions and assemblies. Our rubber capabilities include:

- Compression Molding
- Over Molding
- Injection Molding
- Extrusion
- Rubber-to-Metal Bonding

Several rubber materials we use are:

- NR
- SBR
- NBR
- EPDM
- Silicone
- Recycled Materials

Examples of rubber products we make:

- Drive Wheels and Casters
- Gaskets
- Couplings
- Vibration Mounts
- Material Handling Components
- Power Transmission Bushings and Mounts

PLASTIC

We offer a variety of injection molding machines to meet all our customers plastic injection molding needs. Injection molding tooling is offered with quick turnaround prototype molds available. Examples of the plastic processes used are:

- Injection Molding
- Ultrasonic Welding
- Vertical Injection Molding
- Compression Molding
- Casting
- Extrusion/Co-Extrusion
- Rotational Molding
- Insert Molding
- Over Molding
- Thermoforming
- Blow Molding
- Vacuum Forming



Not only does East West have the global advanced electronics manufacturing capabilities to bring these IoT (Internet of Things) devices to life, allowing us to live in a smarter, more connected world, but our customers receive greater value by leveraging our design experts to ensure these products are being made in the most cost-efficient and reliable manner.



Bluetooth & Wifi

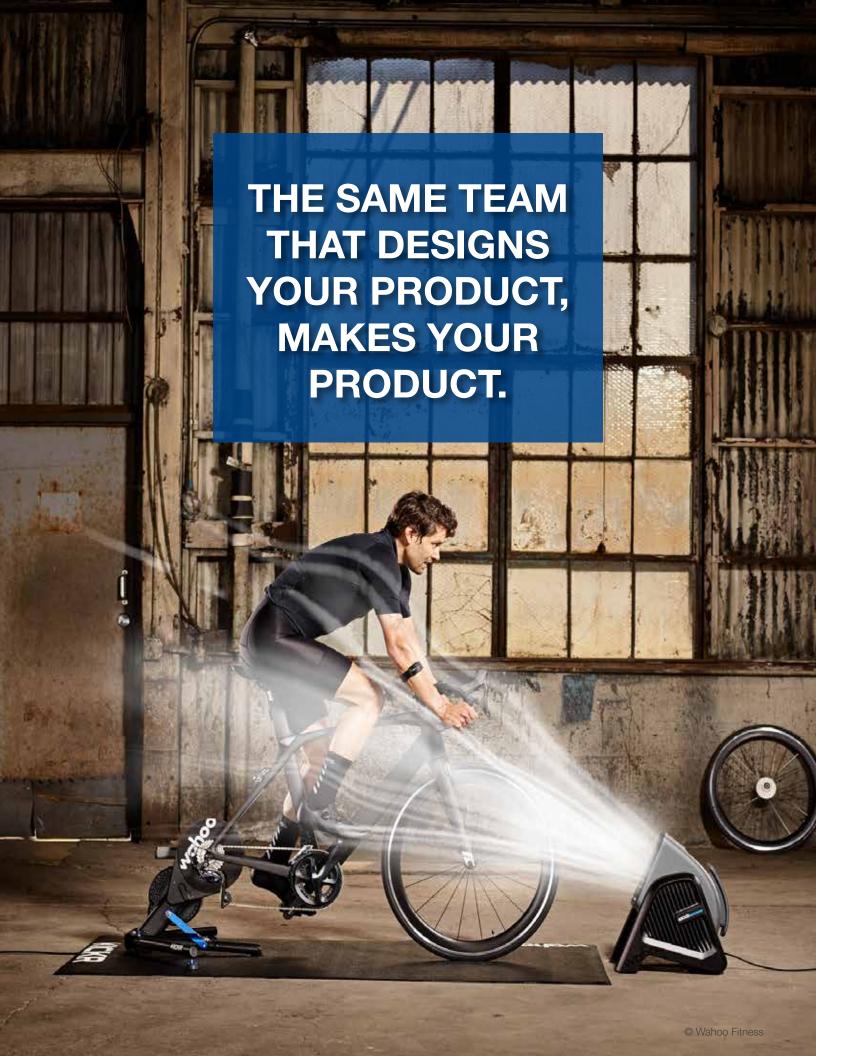
As the reigning kings of IoT, a strong understanding of bluetooth and wifi connectivity are essential to designing and manufacturing products with reliable bluetooth and wifi capabilities. Our team has extensive experience in both technologies.



Smart Sensors

IoT simply could not exist without smart sensors, East West's engineers are kept current in this evolving technology so we can ensure your products perform with the most reliable monitoring, communication and visibility.





DESIGN SERVICES

OVERVIEW



EAST WEST'S DESIGN SERVICES team

offers expert consultation with a team of design engineers specializing in mechanical or electromechanical components, subassemblies or projects. Whether you're looking for a major redesign for technical purposes or to reduce costs, we will work with you to take your product specifications and turn them into a production-ready design.



WITH ACCESS TO DESIGNERS in the U.S.

and overseas, our design services team can generate designs at a fraction of the cost of other firms. Using advanced technology like Computational Fluid Dynamics (CFD) and Finite Element Analysis (FEA) software, our design engineers can test your design prior to prototyping, saving you valuable time and money.



WE USE PRINCIPLES of Design for Manufacturability (DFM) and Design for Assembly (DFA) to examine your product or specifications and look for ways to reduce manufacturing costs without sacrificing performance. When it's time to see how your design will look and perform as a physical piece, we offer 3D and CNC machined samples to move your project further down the path to production.



DISTRIBUTION SERVICES

BY EAST WEST



East West offers an assortment of optional supply chain management services to help make the logistics process easier for you. We can arrange shipment of product to the port of your choice and you can handle the process from there. Our domestic warehouses in Georgia and California allow us to ship to either coast, where we can cross-dock and deliver your products faster.

PRODUCTS READY WHEN YOU NEED THEM.

SUPPLY CHAIN MANAGEMENT, & WAREHOUSING

- Capacity Optimization and Production Order Planning
- Freight Consolidation
- Ocean Freight Management
- Insured Ocean and Inland Freight
- Bill of Lading Preparation
- Customs Clearance and Duty Prepayment
- Cross-Docking (Providing Doorto-Door Delivery)
- On-Time Delivery

DOMESTIC INVENTORY/ SAFETY STOCKING OPTION

For customers who need product on demand (JIT), we offers domestic inventory and safety stocking options, so your products will be ready exactly when you need them. Our Vendor-Managed Inventory (VMI) program can help plan your order demand throughout the year. We will work with you to analyze your annual usage, predict when demand will spike and place your orders so that you have product at your door ready to go when you need it.

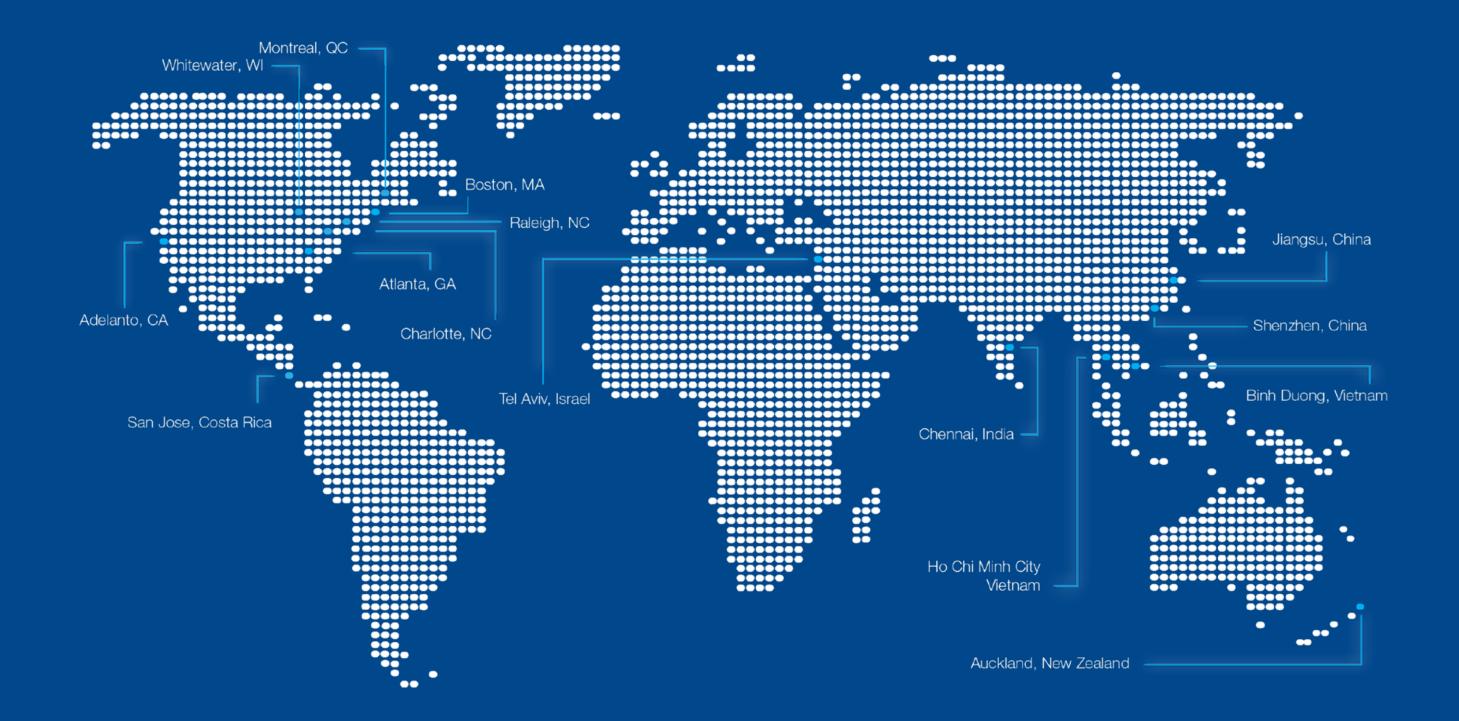
DISTRIBUTION & FULFILLMENT

East west truly offers a full package solution by providing order fulfillment services and distribution to your end customers. Those choosing this service will benefit from our automated interface with barcode capabilities, order tracking and reporting as well as shipping of pallets, cartons or individual units to your customers.



EAST WEST BELIEVES

there is one place in the world that is the best for manufacturing any product. With locations throughout the globe, we are able to best match your product to one of our factories to save you time and money, while never sacrificing quality or ease of communications.









AREAS OF FOCUS

electronics, tooling, medical product manufacturing, plastics



DIVERSIFICATION

Vietnam's supply chain is insulated in many ways from China, making it a great option to diversify and protect your company's supply base.



INFRASTRUCTURE

New port facilities, highway and skyscrapers make this country ever-growing with the realization that investment will bring growth.



FINANCIAL

Labor costs, taxes and currency all play in Vietnam's favor with significant tax incentives being offered. Market labor rate is roughly one-third of China's.



RAW MATERIALS

One of its most attractive benefits is the presence of crucial raw materials, including rubber trees and bauxite ore reserves.



SNAPSHOT: Ho Chi Minh City, Vietnam

AREAS OF FOCUS

rubber, plastics, industrial textiles, aluminum extrusions and assemblies

In operation since 2004, the Ho Chi Minh City office was East West's first operation outside of China. Our migration to Vietnam was due to the abundance of raw materials and natural rubber resources. We use several rubber materials including NR, SBR, NBR, EPDM, silicone and recycled materials.

As an example, some of the rubber products we make in this facility include drive wheels and casters, gaskets, couplings, vibration mounts, material handling components and power transmission bushings.

Vietnam was the third largest producer of natural rubber in 2018. Proximity to the raw material combined with a knowledgeable workforce makes this country a top choice for manufacturing rubber parts and products.



CHINA

SNAPSHOT: Shenzhen, China

AREAS
OF
OF
FOCUS

injection molded plastics,
stamped metal, die casting,
machining, forging, SMT and
other electronic assemblies

East West's Shenzhen, China office manages the manufacturing performed by East West's China subsuppliers. Additionally, this location handles sourcing, quality control and logistics.







SNAPSHOT: San Jose, Costa Rica

AREAS OF FOCUS

advanced electronics, medical products, box builds

NEARSHORE ADVANTAGES

East West's Costa Rica factory is located in a free trade zone with 15 FTAs, including both China and the United States. Its close proximity to the U.S. allows customers the advantage of greatly reduced lead times (10-12 day average) compared to those of Asia with competitive labor rates. Operating on Central Standard Time with a young, talented workforce, many of whom are fluent in English, communication is made simple and travel to the facility is convenient. This location is highly scalable, allowing our customers to grow seamlessly as their production demands increase.



NORTH CAROLINA

SNAPSHOT: Charlotte, North Carolina

AREAS OF FOCUS

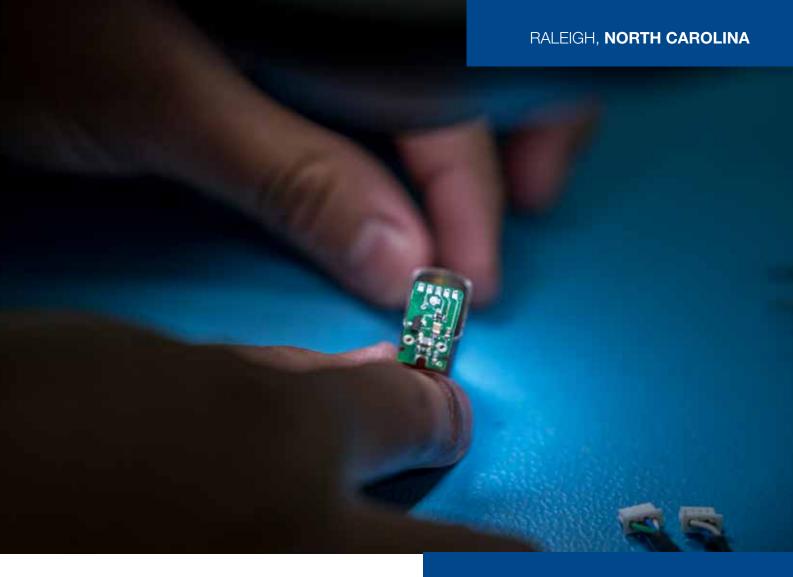
rubber, plastics, industrial textiles, aluminum extrusions and assemblies

OUR DOMESTIC
OPERATIONS
ALLOW COMPANIES
TO BEGIN WITH
LOWER VOLUMES
AND ACCESS TO
STREAMLINED
INTEGRATION TO
A GLOBAL SUPPLY
BASE AND OFFSHORE
OPERATIONS ONCE IT
IS TIME TO RAMP.

Specialized in low volume, high mix production for high complexity PCBAs and electromechanical assemblies.

Compatible for PCB assembly requiring multi-layer, double-sided, BGA and high component count.

Offers domestic customers a seamless transition to East West's global facilities when it is time to scale production, including its sister facility in Costa Rica.





SNAPSHOT: Raleigh, North Carolina

AREAS OF FOCUS

PCB Assembly, box builds, new product introduction, wire and cable harness

Located near Raleigh, North Carolina, this facility offers both surface mount technology (SMT) and thru-hole for PCB Assembly, in addition to their extensive wire and cable harness capabilities. This factory is ideal for low volume, high mix production runs as well as new product introduction.

ATLANTAHEADQUARTERS

OVERVIEW

ENGINEERING SUPPORT

in the United States allows us to easily recommend design improvements, enhance functionality and round out specifications that can not only improve the performance of your product, but reduce cost as well.

SUPPLY CHAIN MANAGEMENT & LOGISTICS

will not only handle the seamless transportation and distribution of products, but also gives you access to a vast range of reliable, trustworthy suppliers throughout the globe. We've spent years developing these relationships so you can rest assured you're getting the parts of the highest quality.

CUSTOMER SUPPORT

at the highest level is always one of our most important objectives. We have a team dedicated to keeping you informed during every step of the design and production process, ensuring you're able to get any questions or concerns addressed quickly.

PROFESSIONAL SERVICES are also

housed in our Atlanta office, including accounting, human resources, marketing, sales and more. While many of these departments work behind the scenes, their contributions complete the East West family and allow operations throughout the company to run smoothly and proficiently.

VENDOR-MANAGED INVENTORY

is operated out of our warehouse in Decatur, Georgia. Should you choose to take advantage of this program, we will either monitor your inventory using our own team, or gather stock information from you. We can help you make better buying decisions, including managing costs by reducing spikes and dips in inventory.

