



# Accelerating Innovation.

# 5

**5 ways** Integrated Manufacturing Solutions  
Accelerate Medical Device Innovation

# Your gateway to Scalable Manufacturing.

How integrated manufacturing service (IMS) partners help OEMs move faster, reduce risk, and scale with confidence.

Medical device companies are being asked to do more, faster, as products become increasingly complex, development cycles continue to compress, and supply chains remain unpredictable, all while expectations around quality, compliance, and performance continue to rise.

From surgical robotics to connected diagnostics and home monitoring devices, innovation is accelerating across the industry. But bringing these products to market is not getting any easier.

As a result, many OEMs are rethinking how they approach manufacturing. Instead of relying solely on internal resources, they are partnering with full-solution IMS providers who can support design, prototyping, and production as a unified process.

Outsourcing today is not simply about cost. It is about speed, control, and confidence. This paper outlines five ways outsourcing to a strategic manufacturing partner can help medical OEMs accelerate development, reduce risk, and build more resilient operations.



# 1

## Engineering Collaboration Improves Design from the Start

The most important decisions are often made at the earliest stages, as choices around components, materials, and system architecture shape everything that follows, including cost, manufacturability, performance, and reliability.

When manufacturing partners are engaged at the design stage, those decisions are informed by real production experience, allowing issues to be identified earlier, trade-offs to be better understood, and outcomes to become more predictable.

### This leads to:

- Stronger alignment between design and manufacturing
- Fewer design revisions
- Improved product reliability
- Faster iteration during development

East West partners directly with OEM engineering teams to provide Design for Manufacturing, Design for Assembly, and Design for Test insight from the outset. The goal is simple, ensuring what is designed can be built, scaled, and delivered without compromise. For complex medical devices, this level of collaboration is not optional but foundational.



# 2

## Prototyping and NPI

### Capabilities Accelerate Time to Market

While speed matters, speed without structure creates risk. Moving from concept to production requires coordination across prototyping, validation, and scale-up. Delays often occur at the handoff points between these stages. A full-solution partner removes those gaps.

East West supports rapid prototyping with quick-turn builds completed in as little as 72 hours. This allows teams to test and refine designs without slowing development momentum. More importantly, prototyping is not treated as a standalone step. It is part of a broader New Product Introduction process designed to ensure predictable outcomes.

*“Speed in medical device development is not just about moving quickly. It is about moving with control. When prototyping, engineering, and manufacturing are aligned from the start, OEMs can reduce risk while accelerating time to market.”*

**Victor Sánchez, General Manager at East West Costa Rica**

#### **New Product Introduction (NPI) at East West includes:**

- **BOM analysis and component validation**
- **Design for Manufacturing and Design for Excellence reviews**
- **Tooling development and process validation**
- **PPAP documentation and production readiness**

Engineering, sourcing, manufacturing, and quality teams work in coordination, resulting in a clear path from concept to production. For OEMs, this reduces friction, improves visibility, and shortens the time between idea and execution. In more regulated environments, where validation is critical, that advantage becomes even more meaningful.



# 3

## Global Manufacturing Networks

### Provide Cost Control and Flexibility

Cost still matters, but flexibility now carries equal weight. OEMs need the ability to adapt, shift production, and respond to changing demand and external pressures without disruption.

Outsourcing provides that flexibility by enabling more agile and responsive manufacturing strategies. With the right partner, production is no longer tied to a single location or fixed cost base. It becomes a dynamic system that can scale and adjust as needed.

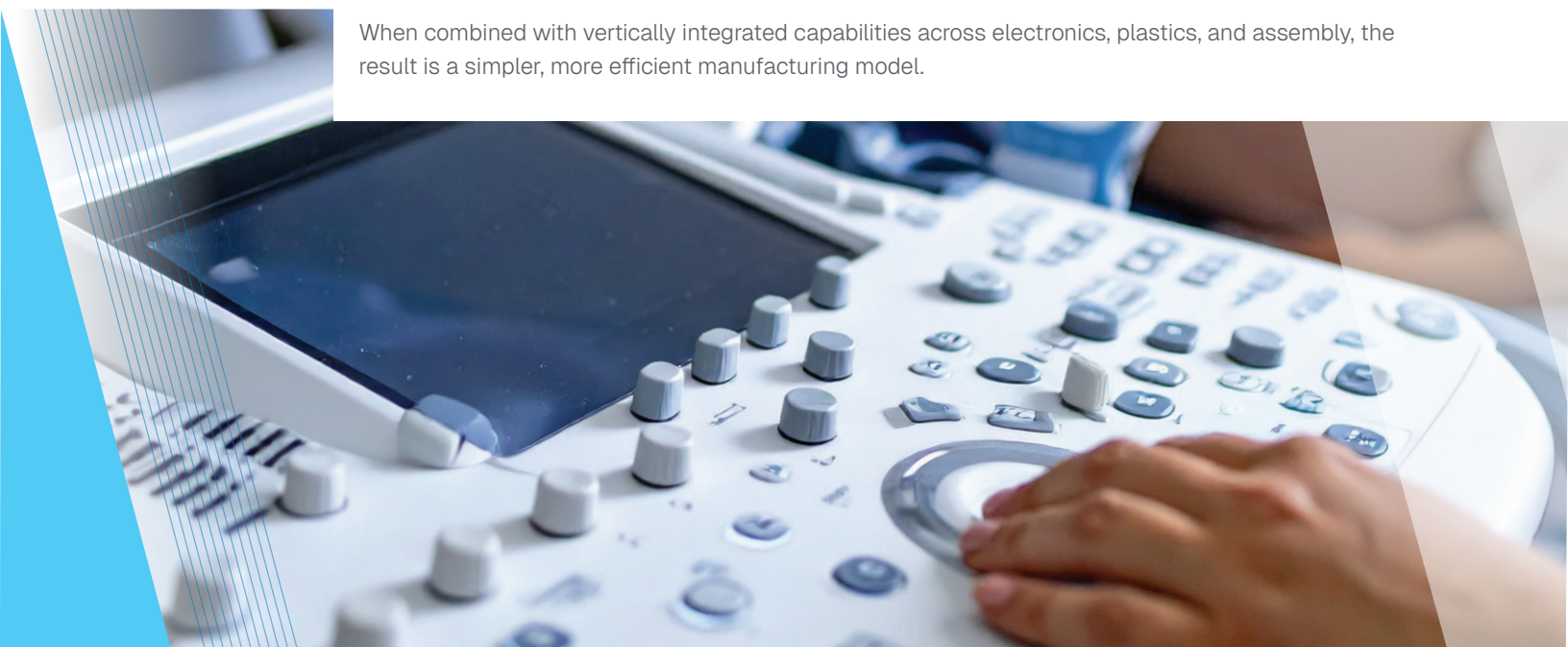
East West operates across the United States, Mexico, Costa Rica, and Asia, giving OEMs access to a balanced global footprint. Our Costa Rica facility offers a clear example. Located in a free trade zone, it enables duty-free import and export, supported by more than 15 international trade agreements. Combined with nearshore proximity to the U.S., this creates a model that supports both cost efficiency and speed.

In addition to nearshore capabilities, East West's presence in Asia, specifically Vietnam, allows OEMs to manage tariff exposure and optimize cost structures across regions. This flexibility is increasingly important as companies look to reduce reliance on single-country manufacturing and adapt to shifting trade policies.

#### For OEMs, this means:

- Lower landed costs
- Shorter lead times
- Greater supply chain alignment
- More control over where and how products are built

When combined with vertically integrated capabilities across electronics, plastics, and assembly, the result is a simpler, more efficient manufacturing model.



# 4

## Supply Chain Strategy Becomes a Competitive Advantage

Supply chains are no longer a background function, but a source of either risk or competitive advantage, as recent years have clearly shown.

OEMs are shifting their focus from efficiency alone to resilience, requiring greater visibility, flexibility, and the ability to respond before disruption occurs. Manufacturing partners play a central role in enabling that shift.

**East West supports customers with a proactive approach to supply chain management, including:**

- **Diversified supplier networks**
- **Multi-region sourcing strategies**
- **Continuous monitoring of market conditions**
- **Integrated logistics and inventory planning**

By tracking supply and pricing trends and adjusting strategies in real time, East West helps OEMs stay ahead of disruption instead of reacting to it. The result is greater stability, even in uncertain environments.



# 5

## Quality and Compliance Are Built In, Not Added On

In medical device manufacturing, there is no margin for error. Quality is not a checkpoint, but a system where experienced partners bring that system with them.

**East West operates ISO 13485-certified, FDA-registered facilities that integrate quality into every stage of production. This includes:**

- **End-to-end traceability across components and processes**
- **Validated testing methods tailored to medical devices**
- **Controlled production environments**
- **Continuous process improvement**

At its Costa Rica facility, advanced capabilities such as high-precision SMT, conformal coating, and full system assembly are supported by testing tools including AOI, X-ray inspection, in-circuit testing, and functional validation.

Every step is tracked, and every process is documented, which helps reduce risk, support compliance, and ensure consistency from prototype through production.



## CONCLUSION

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# A Smarter Way to Build.

Outsourcing in medtech has changed. It is no longer about reducing cost at the expense of control, but building a better system. One that supports speed, quality, and resilience at the same time.

The companies moving fastest today treat manufacturing partners as an extension of their own teams, collaborating early, aligning on outcomes, and building processes that can scale. With the right partner, OEMs gain more than capacity, they gain a true competitive advantage.

At East West Manufacturing, every medical product we build matters because every life using it matters. By combining engineering collaboration, rapid prototyping, advanced NPI capabilities, global manufacturing, and a disciplined approach to quality, East West helps medical OEMs bring products to market faster and with confidence.

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**To learn more about how East West can support your next program,  
contact our team for a technical consultation.**



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