

CASE STUDY

EVBOX



COMPANY

EVBox

INDUSTRY

Electric Vehicle Charging

HEADQUARTERS

The Netherlands

EMPLOYEES

550+

WEBSITE

evbox.com

CHALLENGES

- World-class manufacturing solutions needed to drive rapid market ramp
- Market volatility demanded global supply chain intelligence and best practices
- Navigating market turbulence and business disruption during pandemic

SOLUTION

- Jabil's half-century of automotive and transportation experience and decade of electric vehicle experience brought unique engineering, industrialization and manufacturing solutions
- Jabil's supply chain team leveraged global power and extensive network to solve supply shortages
- Jabil's global IATF-certified manufacturing facilities in Ukraine and Mexico aligned with global product ramp

BENEFITS

- Jabil helped ramp production to 10K units per month; company positioned to produce 200K units annually
- Supply chain intelligence cut lead time for popular product in half; global buying power yielded double-digit savings on electronics
- Fast, efficient pivot during COVID-19 expedited production of four new products per week



EVBox Powers the World of Electric Vehicles with Fast-Charging Infrastructure

Jabil Slashes Time-to-Market by More Than 50% While Ramping Production to 10,000 Units Per Month

The journey to a sustainable future is full of promises and challenges. Achieving the economic, environmental and social discipline needed for global sustainability requires collaboration and partnerships among industry leaders, automotive manufacturers and technology innovators, like EVBox.

EVBox empowers forward-thinking businesses to accelerate the adoption of electric transportation around the world. With more than 200,000 charging ports across 70 countries, the company is gaining ground rapidly in its mission to make sustainable, electric mobility accessible to everyone.

EVBox's scalable product portfolio spans electric vehicle charging infrastructure for residential, commercial and public applications. The company's vast array of solutions and leadership in ultra-fast (DC) charging technology has expanded a small

group in the Netherlands into a global team across multiple offices in Europe and North America.

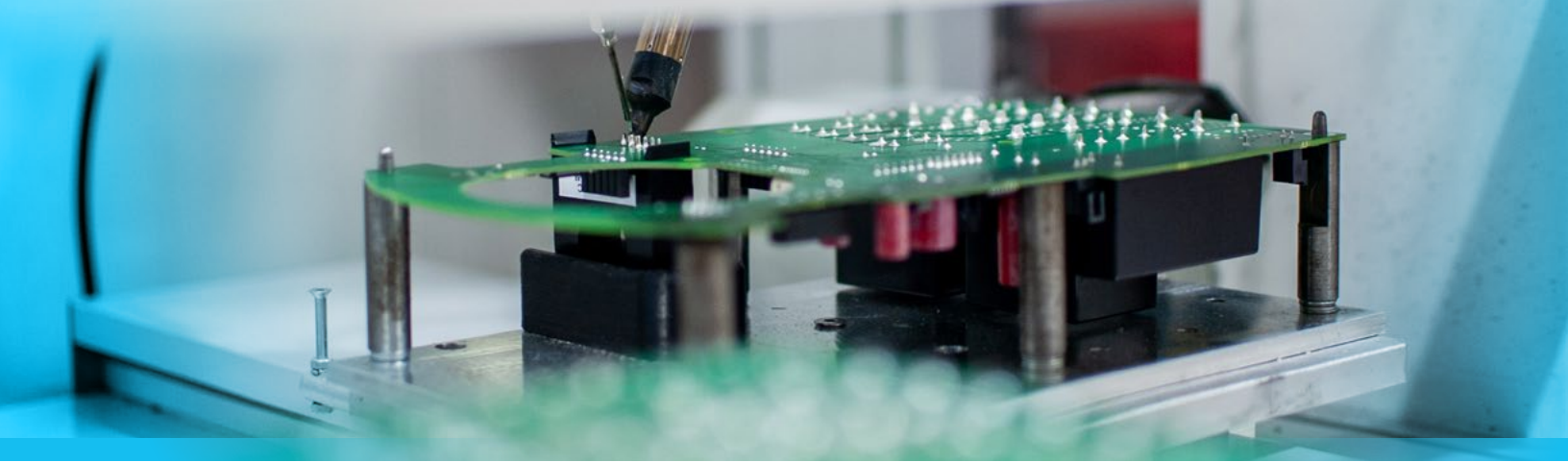
To better support continued global expansion and increased product demand, EVBox needed to elevate its supply chain and manufacturing operations. "Becoming a key global player in the EV charging market requires a supply partner that can deliver exponential growth and steep ramp-ups in production," Matthew Fish, Purchasing Manager at EVBox, explains. "In 2020 we increased production capacity by 300% with the onboarding of Jabil and were able to ramp up production there from zero to 5,000 units/month within a two-month period, which is incredibly aggressive in this market."



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Purchasing Manager, EVBox





Rapid Ramp-Up Required

EVBox quickly realized that assistance from a manufacturing partner with deep automotive experience was essential to ramping to 10,000 units per month, and ultimately more than 200,000 units each year.

“We needed to better enable our steep growth and business strategies,” Peter Elshout, Head of Lean Manufacturing & QHSE, says. “Our ideal partner would offer both flexibility and capacity across our supply chain and manufacturing operations in a short timeframe.”

A more agile and responsive supply chain was needed to address surges in demand without experiencing component shortages. Additionally, more effective risk mitigation was required to protect against market disruptions that could impact product prices and lead times.

Ensuring direct shipments of high-volume, quality products to automotive manufacturers was critical. Equally important was adherence to the International Automotive Task Force (IATF) standard for automotive quality management.

“The requirements of a tier-one automotive supply partner are significantly higher than other markets,” Fish explains. “We needed a partner with a global footprint, optimized supply chain, IATF expertise and a commitment to quality.”

There also is no compromise when it comes to sustainability. EVBox is steadfast in its commitment to meet or exceed environmental laws, conserve resources and minimize waste through the effective use of raw materials and energy-efficient business processes.



It's easy to do business with Jabil when you're coming from the automotive industry. We basically talk the same language, share IATF DNA and understand each other, which makes life easier during ramp-ups.



PETER ELSHOUT

Head of Lean, Manufacturing & QHSE, EVBox

Jabil's Automotive DNA Shifts EVBox into Overdrive

In pursuing a manufacturing partner, Jabil stood out for its half-century of automotive and transportation experience along with more than a decade of proven expertise in electrified vehicle technologies. A strong track record of scaling production of power and charging technology also differentiated Jabil from other manufacturing solutions providers.

With a global, flexible IATF-certified manufacturing footprint, Jabil is ideally suited to support customers facing rapid growth. Additionally, Jabil's Value Analysis & Value Engineering (VAVE) solutions balance cost and performance to deliver the most market impact. The success of this approach is quantified by more than one million electric and hybrid vehicles on the road today using Jabil-manufactured power and charging technology.

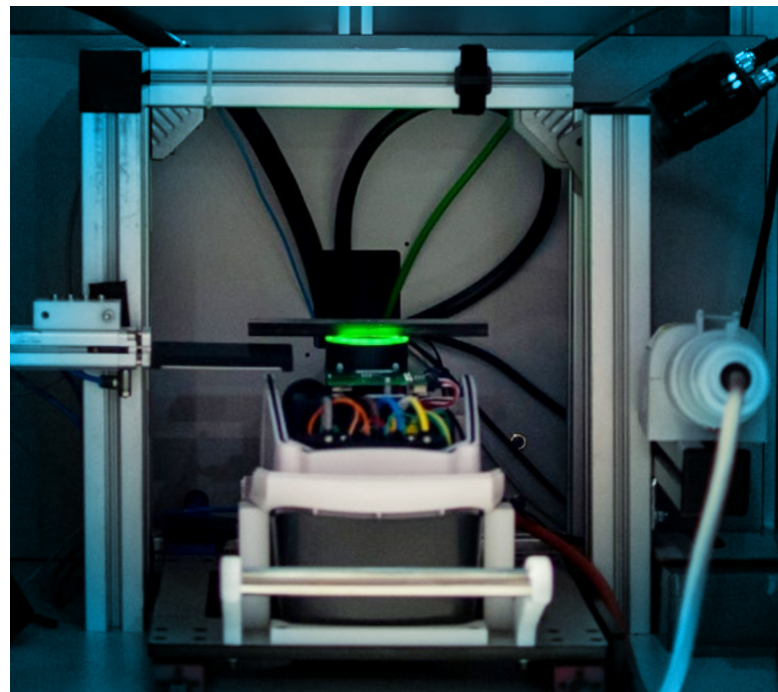
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With highly credible automotive-grade industrialization capabilities and experience in automated production of large, complex assemblies, Jabil plays a crucial role in accelerating time-to-market. Since partnering with Jabil, EVBox has scaled production quickly and increased product volumes while enabling customers and partners to receive products faster. In fact, EVBox cut lead times for its popular EVBox Elvi residential charging station from 45 to 21 days by working with Jabil.

An overarching commitment to innovation also permeates the EVBox and Jabil relationship, including product designs, engineering recommendations and manufacturing. This focus extends to

next-generation product designs, establishing the most effective component supply chains and scaling production in different geographic locations to better support future expansion. "The Jabil team is innovative," Elshout adds. "They're eager to make the right countermeasures and improve KPIs, which gives us confidence they have the right approach."

This customer-focused approach led Jabil to suggest a product change, which entailed supplying the charging cable separate from the main charging station to reduce build complexity. "This innovative thinking helped us optimize logistics, reduce costs and simplify our product range for faster deliveries to end customers," Fish says.



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Driving Smarter Decisions with Supply Chain Intelligence

EVBox maintains unwavering confidence in Jabil's global supply chain intelligence, along with best practices for procurement and commodity management. "It was beneficial to have a flexible partner willing to work with us as we established processes together," Fish recalls. "With Jabil's help, we're moving away from the structure of a startup to a supply chain that is more secure and ready for double-digit growth year-over-year."

Jabil's global buying power yielded immediate double-digit savings on electronics components. Other planning efforts protect EVBox against product obsolescence and component end-of-life. Whenever possible, alternative suppliers are identified to ensure sufficient component supplies at the best possible prices. Jabil's supply chain team also keeps an eye on supply-and-demand levels, empowering EVBox to support 80% of its sales from inventory stock.

"Supplier relationship management has improved under Jabil," Fish notes. "This helps EVBox deliver a better product at a better cost and faster delivery to our end-customers."

Jabil continually validates that all suppliers adhere to strict sustainability requirements while meeting



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ISO 45001 OH&S certifications for occupational health and safety standards. "Not only is Jabil in line with our zero-emission and sustainability achievements," Elshout adds. "They follow best practices for quality and safety."

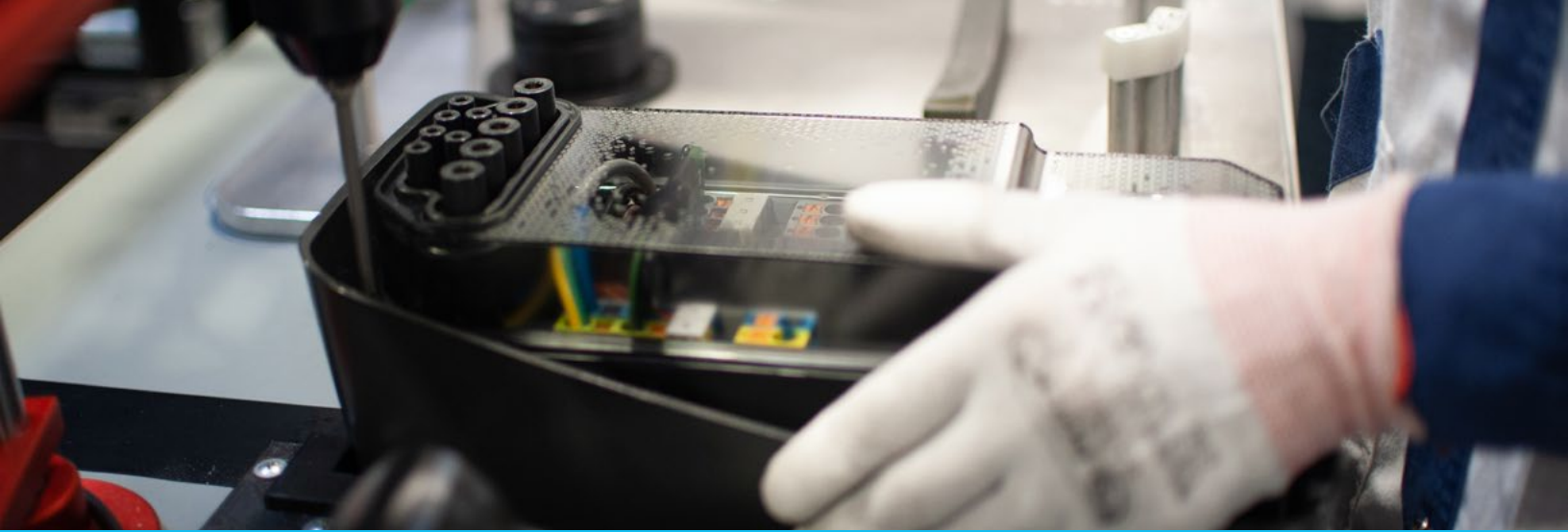
Navigating Market Turbulence During COVID-19

During COVID-19, a quick pivot was necessary when market turbulence impacted businesses and supply chains. In January 2020, EVBox experienced component shortages generated by lockdown restrictions in the People's Republic of China. "Jabil found alternative sources to keep our production schedule on track, which would have been almost impossible for us to do alone," Fish recalls.

Disruption in the automotive market led to an overall slowdown as vehicle shipments were delayed across Europe and other parts of the world. EVBox re-focused on residential charging solutions, which underwent an increase in demand. Jabil demonstrated ingenuity and adaptability to address this growth spurt.

"Jabil showed a degree of flexibility and proactiveness to pivot production needs and mitigate risk in the supply chain that was greatly appreciated, especially given the demand volatility in the market caused by the COVID-19 Pandemic," Fish notes.

Introducing four new products per week during this period was streamlined, thanks to Jabil's workcell model, which ensures EVBox has dedicated resources to coordinate and collaborate on New Product Introductions (NPIs). Pragmatic responses and a mutual mindset for risk mitigation and quality management alleviated threats of supply chain, production and market disruptions.



Accelerating a Global, Growth Trajectory

EVBox is expanding its portfolio of charging solutions and growing its tier-one automotive OEM business at an unprecedented pace. Jabil's automotive team ensures close alignment with IATF priorities while delivering the highest levels of manufacturing quality at Jabil's European manufacturing facility in Ukraine. Following EVBox's recent expansion into North America, the team also is preparing for manufacturing at a Jabil facility in Mexico.

"As a lean manufacturing proponent, it's important for us that each facility adheres to the same standards, which will enable us to scale consistently globally," Elshout says. "There's lots of involvement across our engineering, quality and supply chain teams to help us fulfill our growth strategy."

Jabil (NYSE: JBL) is a manufacturing solutions provider with over 260,000 employees across 100 locations in 30 countries. The world's leading brands rely on Jabil's unmatched breadth and depth of end-market experience, technical and design capabilities, manufacturing knowhow, supply chain insights and global product management expertise. Driven by a common purpose, Jabil and its people are committed to making a positive impact on their local community and the environment.

For Elshout, everyone operating as one team is an essential ingredient to continued success. "The Jabil team considers everyone at EVBox a colleague and they're eager to fulfill our requirements. To streamline efforts, weekly engineering calls with Jabil explore how best to apply advanced technologies, unique displays and smart interfaces. This has led to a massive increase in our interactions, confidence and involvement together," Elshout concludes.

With Jabil serving as a trusted manufacturing partner, EVBox is well positioned to making cleaner transportation more convenient, affordable and compelling.

