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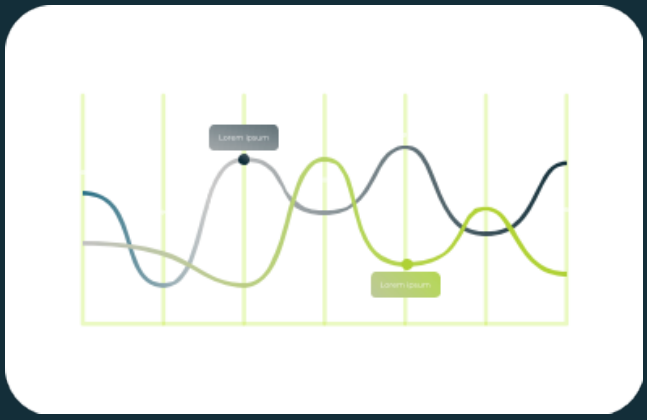
EV charger assembly

Outgrowing your home EV Charging Market?

How to keep your high quality standard,
while your product variations and distance
to customer are growing exponentially?

The electric vehicle (EV) charging infrastructure is evolving at an unprecedented pace, with the demand for charging stations soaring.



For multiple manufacturers this means they will go from 1000 chargers a year to the ambitious goal of 10-20k. So how do you keep your quality standards high, while your increasing quantities and variations in your product line? At CMM Services we have seen this before and to date have assembled over 275.000 charging stations. We did this for Europe, the US and other countries, and understand that quality, availability and reducing costs are the key operational drivers for a successful business. In this blog post, we'll explore six key tips to ensure your assembly line is ready to scale efficiently and sustainably.

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1. Embrace Modular Design to Minimize Product Variations

What we have seen is that EV charging products specifically designed for a single market, need a lot of adaptation to function in other markets. We have seen 70 variations of essentially the same product that was delivered all over the world.
One of the most effective ways to future-proof your assembly line is to adopt a modular design approach. Break down the assembly process into interchangeable modules. This will give you less product variations and an easier assembly line and thus cheaper and easier quality control. Whether it's the power electronics, connectivity components, or the charging interface, a modular design facilitates flexibility and adaptability to changing demands.

2. Adherence to Industry Standards

Bit of a no-brainer in the EV charging business, but adherence to standards and understanding what is on the horizon from a regulatory perspective in the different markets, allows you to stay ahead and avoid unnecessary re-work of inventory. A good example is the EU regulation about right-to-repair, how will this impact your business?

3. Comprehensive Testing Protocols

If you are shipping something a 1000 km away in a different country, it is a lot less easy to solve a problem on site. And customers will be less forgiving than your early ones that got you started. Develop and implement comprehensive testing protocols that cover all aspects of the EV charger's functionality. This includes electrical performance, communication protocols, safety features, and durability under various conditions. Rigorous testing ensures that every unit leaving your assembly line meets or exceeds industry standards. This needs to be documented and can be used for RMA, insurance and efficiency.

4. Start Applying Second Sourcing to reduce Risk and Constraints

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5. Prioritize Workforce Training and Flexibilit

Cross-train your workforce to handle various aspects of the assembly process. A versatile team can adapt to changing production requirements and fill in gaps during peak times. Additionally, invest in ongoing training programs to keep your workforce up-to-date with the latest technologies and industry best practices. A skilled and adaptable workforce is an invaluable asset in future-proofing your assembly line.

Conclusion

Scaling up from 1000 to 10-20k chargers per year is a significant undertaking, but with strategic planning and the right measures, it can be a smooth transition. See these five tips as a starting point, to meet current demands and still provide a high quality product. You will be prepared for the dynamic challenges and opportunities that lie ahead in the rapidly evolving landscape of electric vehicle infrastructure.

About

CMM Services is a 100% focused, EV Charger assembly company headquartered in Amersfoort, the Netherlands. Since 2010 it has positioned itself as a key player in the sustainable transportation sector assembling and delivering charging stations for various parties. To date the company successfully assembled and shipped an impressive 275,000 electric vehicle charging stations. This significant milestone underscores CMM's commitment to advancing the adoption of electric vehicles and contributing to the global shift towards cleaner and more sustainable energy solutions. Leveraging cutting-edge technology and assembly practices with a dedicated team, CMM continues to play a crucial role in shaping the future of mobility by providing reliable and efficient charging infrastructure for electric vehicles worldwide.