

"The refurbished HMI must be better than the original"

JC-Electronics and SCHURTER work closely together on refurbishing HMIs

In an environment where results depend on well-functioning machines, it is imperative that defects are fixed as soon as possible. In nearly two decades, JC-Electronics has become a leading player in the repair and overhaul of industrial electronics for customers around the world. Since the start in 2006, JC-Electronics' specialists have worked closely with SCHURTER in refurbishing HMI systems. Wolter de Jong, COO of JC-Electronics, talking to Sjoerd Mensonides, account manager of SCHURTER Electronics, about that successful cooperation.



Damaged HMI (left) and revised HMI (right)

Wolter: "HMI panels have been produced in large numbers and types over the years. Many HMI applications that are still in full operation are no longer supplied or supported by the relevant manufacturer. For repair, customers can then come to us. SCHURTER provides us with the parts we need to give the product a second life, such as foils, membrane switches, and touchscreens."

Sjoerd: "JC-Electronics operates in a special market segment. When they first came to us, the service and repair market was quite unknown to us. A product in the field that breaks down has to be repaired. Often, that includes a control panel or touchscreen. JC-Electronics came to us asking if we could repair those. Whereas we normally work with drawings and files, now we only have an example. Just

recreate it! That was the initial phase, and what stood out even then was the quality JC-Electronics aimed for. The revised item actually had to be better than the original."

Reliable partner

Wolter: "We got to know SCHURTER as a very reliable partner, which appealed to us. You guys took charge of the whole process, from designing to actually producing the desired items. Everything is customised and drawn specifically for us by your engineers."

Sjoerd: "Reliability goes beyond just the product. It's also about the agreements you make and how you work together as companies."

Wolter: "When we started, we mainly carried out repairs. Gradually, we started

buying more and more products, which were then revised by us and put in stock for our customers."

Sjoerd: "Many of these HMIs are used intensively in production processes, and these are always situations where downtime costs money. Then it is important to be able to deliver as quickly as possible. That is why it is so strong that now no specific product has to be repaired first: it is in stock at JC-Electronics and can be replaced immediately. The product that is handed in is repaired and that's how you keep that flow going. That's a very nice concept."

Sustainability

Refurbishing equipment extends its lifespan, which is good news in the fight

against waste. Wolter: "To be honest, we didn't start out as a sustainable or circular company. We started with the idea 'It worked, so it can work again.' After all, it's a waste to just throw something away. Since then, sustainability has become more and more important, and we have become more and more circular in everything we do. We are now developing a calculator that allows you to calculate exactly how many raw materials and CO2 emissions you save with a product reconditioned by us."

Sjoerd: "Refurbished at JC-Electronics is really refurbished. A defective product is not only repaired. It also gets a new housing and a new membrane switch or touchscreen. It will literally be as good as new again, with a 2-year warranty."



Damaged and revised membrane control unit

Wolter: "Our overhaul process is now audited by DEKRA. We already underlined our quality and guarantee with the JCertified quality seal. Now we have set up a general quality label together with a French company. Other companies can also qualify for this, it shows the quality of the process."

"We know how these products are designed and made. We can share that knowledge for the overhaul and replacement market as well"

Wolter continues: "We want to show that we replace wear-sensitive components as standard. Take membrane switches, for example. Those last a long time, they can easily be pressed a million times. But when we receive them, we don't know how many times that button has been pressed. That's why we replace them as standard, purely so we can offer a 24-month warranty."

SCHURTER now supplies more than 100 items to JC-Electronics. Sjoerd: "That's not just one product group, it's the entire product line we develop and produce. From a simple overlay or pass-through film to glass windows, membrane switches and touchscreens. And besides products,

we also share knowledge with each other. In the early days, we invited your assembly staff to show how to clean an enclosure and how to glue a membrane switch, for instance. JC-Electronics was still a small company then; I like to see how you have grown since then. In the beginning, people may have looked up to us a bit, but when I look around inside your place now, it's almost the other way around."

Delivering from stock

Sjoerd: "The service market is more difficult to predict, at JC-Electronics, the demand depends on what comes in. In this we help each other: if JC-Electronics needs 25 pieces of a product, we can choose to produce fifty and keep half in stock. Because for us, it is more economical to produce larger series. So, you try to accommodate each other, and the advantage is that if it is in stock, it can be delivered quickly."

Wolter: "That often won us over, especially in the early days. Stockpiling means an investment on the one hand, but on the other hand, it allows you to improve your service. If our supplier then says, we'll send 25 first and you call off the other half in six months' time, that makes a huge difference for us and it makes decision-making a lot easier. Especially if you are a growing company."

Fewer brands

Wolter: "In 2021, we had 150 brands that we reviewed, in 2022 we started to reduce that to nine. It was time to start focusing more. Because every time an engineer gets a new product in, he has to start researching and testing it. That takes time, time in which you can't help other customers, and that means delivery times increase. At some point, we had to make choices, do only what we are good at. In our case, that means specialising in a few brands."



Production at SCHURTER in the Netherlands

PCAP-touchscreens

With the growing popularity of PCAP-touchscreens, JC-Electronics knows that the demand for service is also going to increase for this type of HMI. Wolter: "If you look at how parts of a PCAP screen are glued together, it does present a challenge to make them repairable."

Sjoerd: "A membrane switch has an adhesive layer that you can open up pretty well. PCAP touchscreens are glued into a housing with a sealant. Very robust, but therefore more difficult to take apart. Of course, we would like to think along with you about that: what is an ideal method for this? The great thing is that we at SCHURTER helped develop this PCAP technology ourselves. We have the expertise, know how these products are designed and made. We can also share that knowledge with our partners for the overhaul and replacement market."

About SCHURTER

The SCHURTER Group is a globally successful Swiss technology business. With our components ensuring the clean and safe supply of power, input systems for ease of use and sophisticated overall solutions, we impress our customers with agility and excellent product and service quality.

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