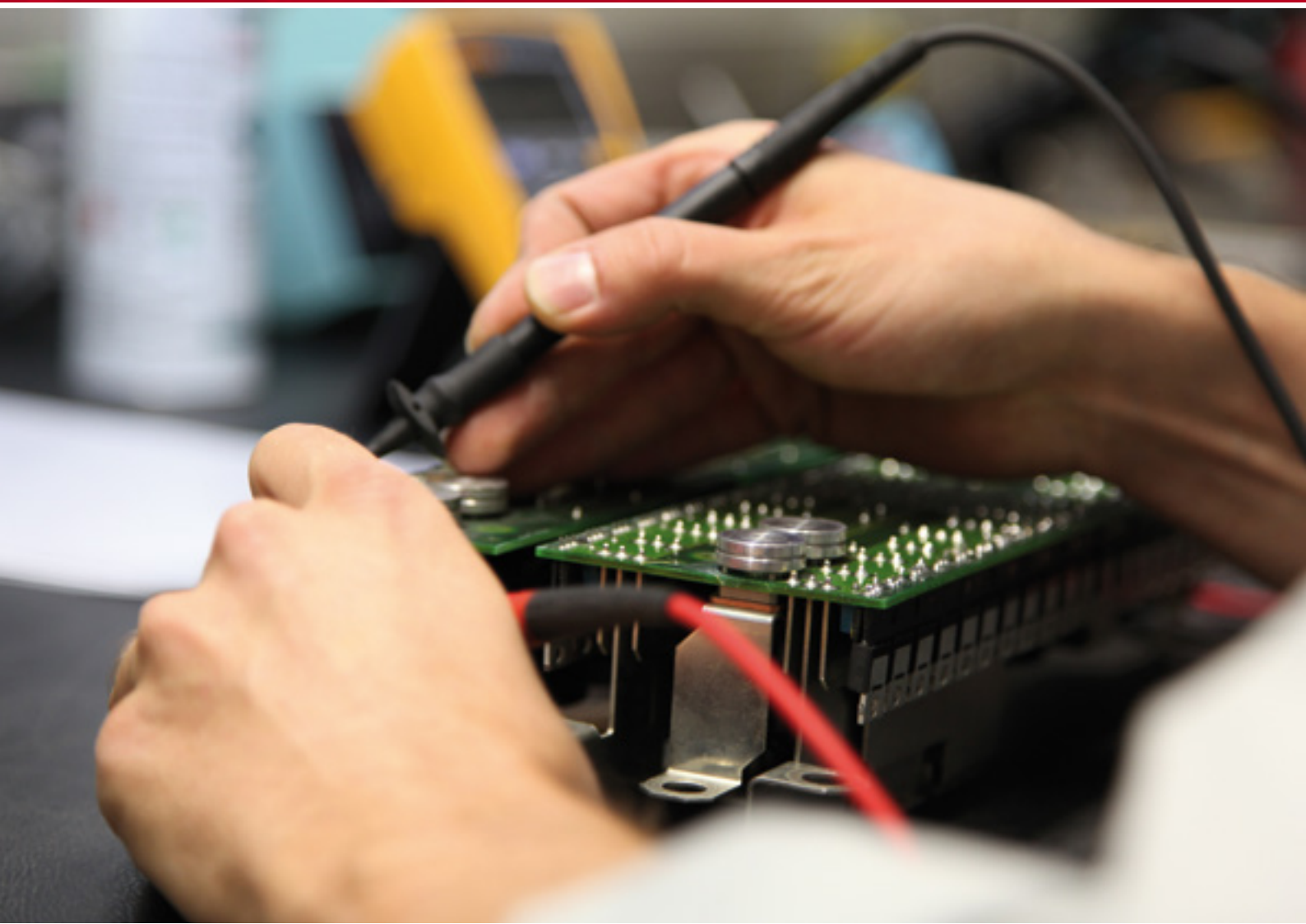


Discover our  
**Electronics  
Department**



## FACTS & FIGURES

- We started 20 years ago and have experienced a strong growth, from 8 electronic technicians in 2003 to more than 50 technicians 10 years later.
- We are Europe's largest, best equipped and most diverse service centre for the repair of electronic parts for forklifts, aerial work platforms and industrial in-plant vehicles.
- At the beginning of 2012, we moved to a new facility of 3500 m<sup>2</sup> where we have a state-of-the-art lab that is also ESD-safe.
- We repair over 25 000 electronic parts each year.

## OUR RANGE

### Printed circuit boards

All printed circuit boards are repaired in a professional manner. TVH has an extensive range of tools to do so, including rework stations, hot air soldering stations, de-soldering stations, hot-plates, reflow oven, ultrasonic cleaner ...

After they have been repaired, the printed circuit boards are tested in the machine, on a simulator or on an automated tester. This tester checks the complete functionality of the PCB and then prints a test report. When all tests have been performed, the printed circuit boards are covered with a conformal coating to protect them against moisture and dirt.

### Electronic speed controllers

Even our power controllers are subjected to a functionality test similar to the test performed on our printed circuit boards. Since we are still not completely sure of the functioning under full load after performing the functionality test, each speed controller is also subjected to a performance test. If the controller passes both tests, then we are as good as certain of the functioning of the part. For parts with intermittent errors we can perform endurance tests up to several days.

### Displays

We stock a wide range of exchange displays and battery indicators. Damaged housings and front foils are replaced if necessary, so that the part looks as good as new. After being repaired, the displays are tested on our universal functionality tester.





## Joysticks, accelerators and directional switches

Whether it be analogue, digital or CAN-bus joysticks, directional switches or pedals, we repair all input devices and then test them on our functionality tester. Not only the faulty parts, but also all wear parts are replaced.



## Chargers

All types of chargers – including high-frequency chargers – are repaired at our facility and then tested on a special power test bench. Regardless of the voltage or current, the tester is capable of simulating any type of battery. The in-house developed software allows us to print the charging curve.

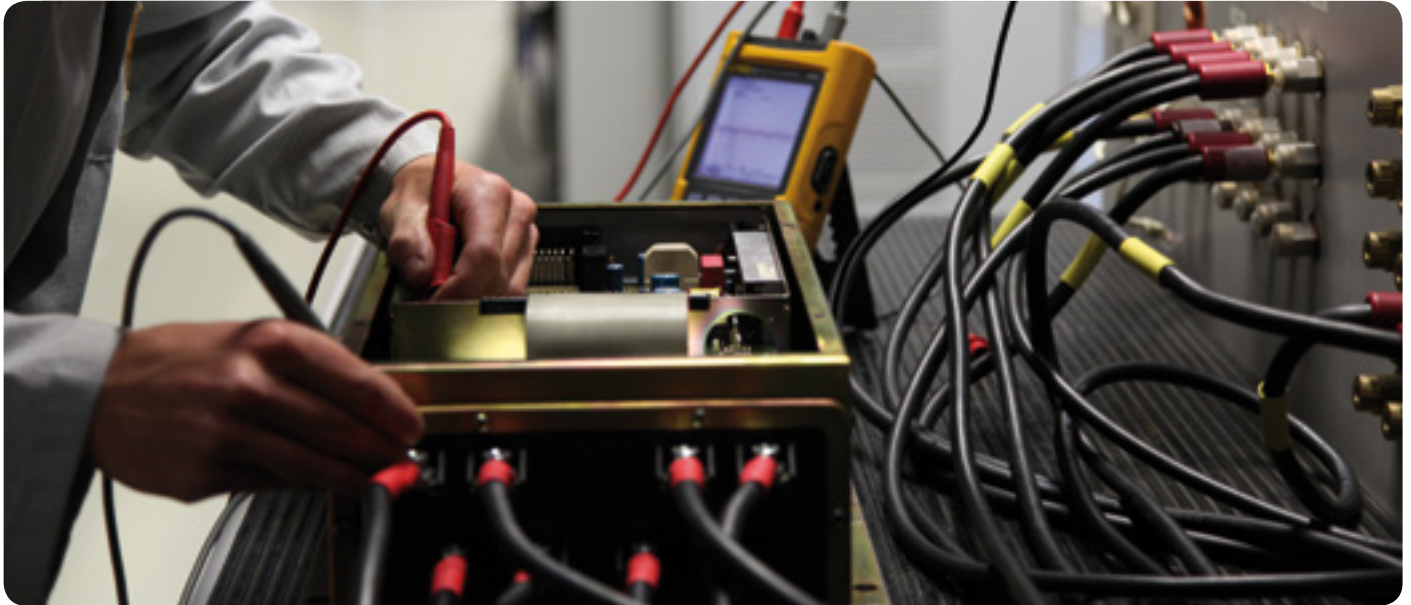


## Contactors

After a thorough cleaning, our contactors are equipped with a new contact set and coil if necessary. All important parameters such as pull-in voltage and pick-up time are checked afterwards.







## BRANDS

Each of our engineers is specialized in a specific brand so that we can guarantee an optimal quality, and this is the result of an optimal knowledge. Each engineer is supported for this by our Research & Development team, who provides the perfect test systems.

As a result of this thorough way of working, we were able to realize collaborations with:



TVH is the Curtis Authorized Service & Repair Centre for Europe



TVH is a distributor of Sevcon



TVH is a worldwide distributor of PG Drives Technology

We repair parts used for all major brands.

AICHI – ATLET – BOSCH – BT – CABLEFORM – CATERPILLAR – CESAB – CLARK – CROWN – CURTIS – DAEWOO – DANAHER-MOTION – ELEKTROSISTEM – FIAT – GENERAL ELECTRIC – GENIE – GROVE – HAULOTTE – HAWKER-OLDHAM – HITACHI – HYSTER – ICEM – ISKRA – JLG – JUNGHEINRICH – KOMATSU – LAFIS – LANSING – LINDE – MANITOU – MITSUBISHI – NICHYU-NYK – NISSAN – PG DRIVES – PIMESPO – PRAMAC – ROCLA – SEVCON – STILL – TCM – TENNANT – TOYOTA – UPRIGHT – WAGNER – YALE – ZAPI – ZIVAN – ...



PARTS & ACCESSORIES



## WARRANTY

All reconditioned parts are supplied with the same warranty period as our new parts. All engineers work in an ESD-safe way and all our controllers and printed circuit boards are delivered in a sealed antistatic bag. In addition to the sealed packaging, each part is also equipped with a label carrying a unique number, so that everything can be traced and the complete history remains available.

## POSSIBILITIES

### Reconditioned parts

TVH has the most extensive range of service exchange printed circuit boards in the world. The fastest and most economical way to get your machine up and running again!

This way we also take care of the environment.

### Customer repair

Send us your faulty parts for repair and we will send you a price estimate, after which you can decide whether you would like us to repair the part or not.

Important! Use our repair form and complete it. Then attach one copy to the box and put one copy in the box. Always make sure to give a clear description of the fault. You can find the repair form on our website: [www.tvh.com/repairform](http://www.tvh.com/repairform)



**Reconditioned  
Recycled  
Reliable**

## We buy your cores

We are interested in your old electronic parts! The parts must be repairable. Check if they aren't burnt or affected by acid. Fill in our 'Core Purchase' document and mail it to: [cores.electronics@tvh.com](mailto:cores.electronics@tvh.com)

You can find the 'Core Purchase' form on our website:  
[www.tvh.com/corepurchase](http://www.tvh.com/corepurchase)

## Retrofit

Did your lift truck break down and are the parts no longer available or simply too expensive? Then we will try to find an alternative for you. By means of your complete truck details, we check if a new controller is available to convert your machine. We also welcome new projects that require an electric drive.

## Handset rental

Do you require an expensive handset once in a while?

Our sales department can check for you if the handset in question is available for rental.

**If you have further questions or require extra information, you can always contact your contact person within TVH.**





## SERVICE

We offer technical support to our customers in various languages, i.e. Dutch, French, English, German, Spanish, Italian, ...

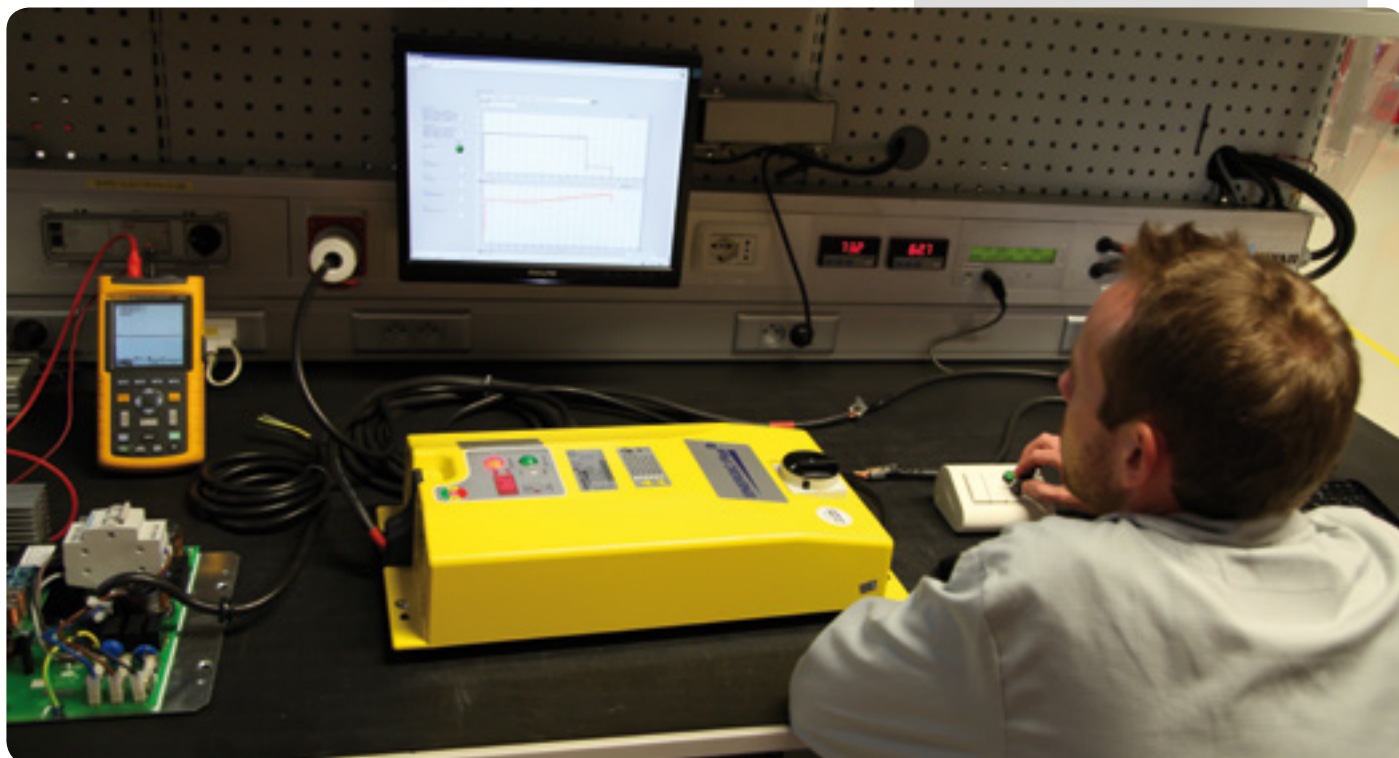
Do you have any problems with parts you bought from us, such as error codes, connection problems ...?

We will search for the appropriate solution for you. Your contact person at TVH will put you in contact with one of our specialists.

Scan the code to watch the film that guides you through our electronics department, or go to <http://youtu.be/TVxbA9YSEus>



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