



# **■ CIMAR ELECTRONICS**

## SPECIALIST IN ELECTRONICS AND ELECTROTECHNOLOGY

Since 1990 Cimar Electronics has been a specialist in the field of electronics and electrotechnology. Cimar Electronics is your reliable partner for the entire process, from concept to distribution. We can carry out all desired steps for you, such as design, assembly, testing, inspection or distribution.

#### FROM PROTOTYPE TO FINAL PRODUCT

Cimar Electronics stands for launching your product together. As a specialist we are continuously challenged to supply the assembly of PCBs, control units and –panels and various electronic and electrotechnical devices. If we are involved in the product development stage as well, we can avoid possible productionand technical problems as a result of the design already at an early stage. By using advanced techniques and multiple control moments during the production process we can guarantee a constant quality. With over 50 experienced colleagues we are facing this challenge confidently.

"Our specialists support you throughout the en-

tire process, from concept to final product: the

Cimar- team is at your disposal.

Marius van Ekris - Managing Director



We believe in the strength of partnerships. Cimar Electronics has the knowhow and experience to be your reliable partner during the entire process from product development to final product. Together with our customers we can launch products fast and at a competitive cost price.

#### **FULLY CERTIFIED**

Cimar Electronics is fully certified; we work according to the strictest directions in the electronics industry. We are ISO-9001 and ISO-13485 certified and apply the industry standard IPC-A-610 (PCB assembly) and IPC/WHMA-A-620 (cable- and wire assembly).

Besides, Cimar Electronics is entitled to assembly and deliver control panels which meet the UL-certification mark. We can take care of CF-marks as well.





# AREAS OF EXPERTISE OF CIMAR ELECTRONICS

### OUR STATE OF THE ART WORKING METHODS

### PRODUCT DEVELOPMENT

The current world has a growing need for technology and automation. Knowledge and innovation are crucial factors. Factors which are interwoven with the DNA of Cimar Electronics and which we, in combination with a high quality standard and passion for technique, wish to apply in order to develop products which can be produced efficiently. As we support you in every step of the way, Cimar Electronics can already be a reliable partner during product development.

Cimar Electronics prefers to consider clients as partners during the development process. As we think along already at an early stage and advise you with regard to the maximum achievable production-efficiency, we can produce larger quantities after the evaluation of the pilot run.

"The added value of Cimar Electronics: Thinking along and advising in the development process."

- Klop Innovations



#### FROM 3D- DESIGN TO PROTOTYPE

Cimar Electronics uses 3D-designs in the development phase. These 3D-files can be used to control a 3D-printer, saving time and money to produce a tangible prototype. It allows us to switch from development and production even more efficiently, minimizing the chance on faults in the final products.





# **SMT**

Thanks to the increased demand for ever smaller electronic components and smaller PCBs the development of this technique has speed up. Cimar Electronics has specialised in this SMT-assembly process. Our modern assembly machines and the inspection level enable us to produce high-quality mass-produced articles efficiently, environmentally-friendly and at relatively low costs.

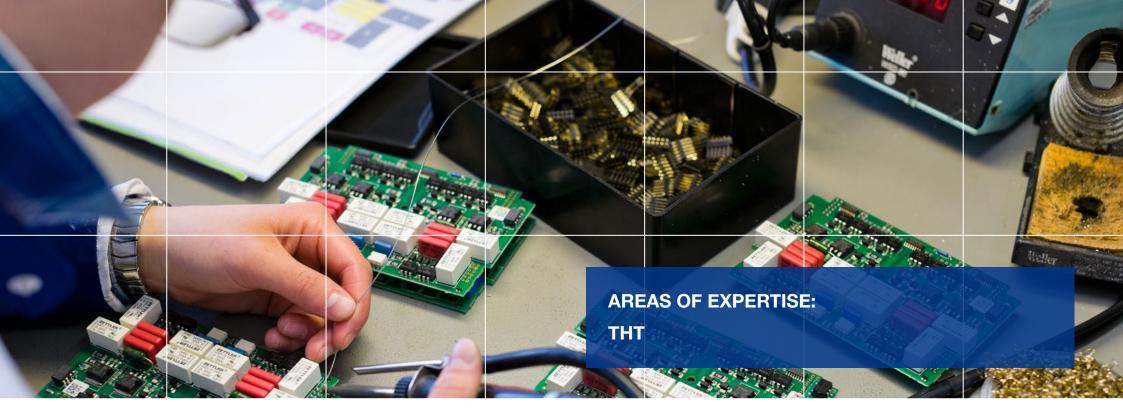
#### **FULLY AUTOMATIC ASSEMBLY**

SMT (Sufrace Mount Technology) is a fully automatic process allowing you to use the PCB surface as efficiently as possible:

by means of this technique more functions can be realized on a smaller surface at a lower cost price. First of all solder paste and components are applied mechanically. Then, the PCBs are put in a reflow-oven which guarantees a perfect solder joint. Various automatic, optical inspections monitor the quality of the PCBs.

"Cimar Electronics has various certificates and standards which are applicable to our products

as well." - Sense-WARE



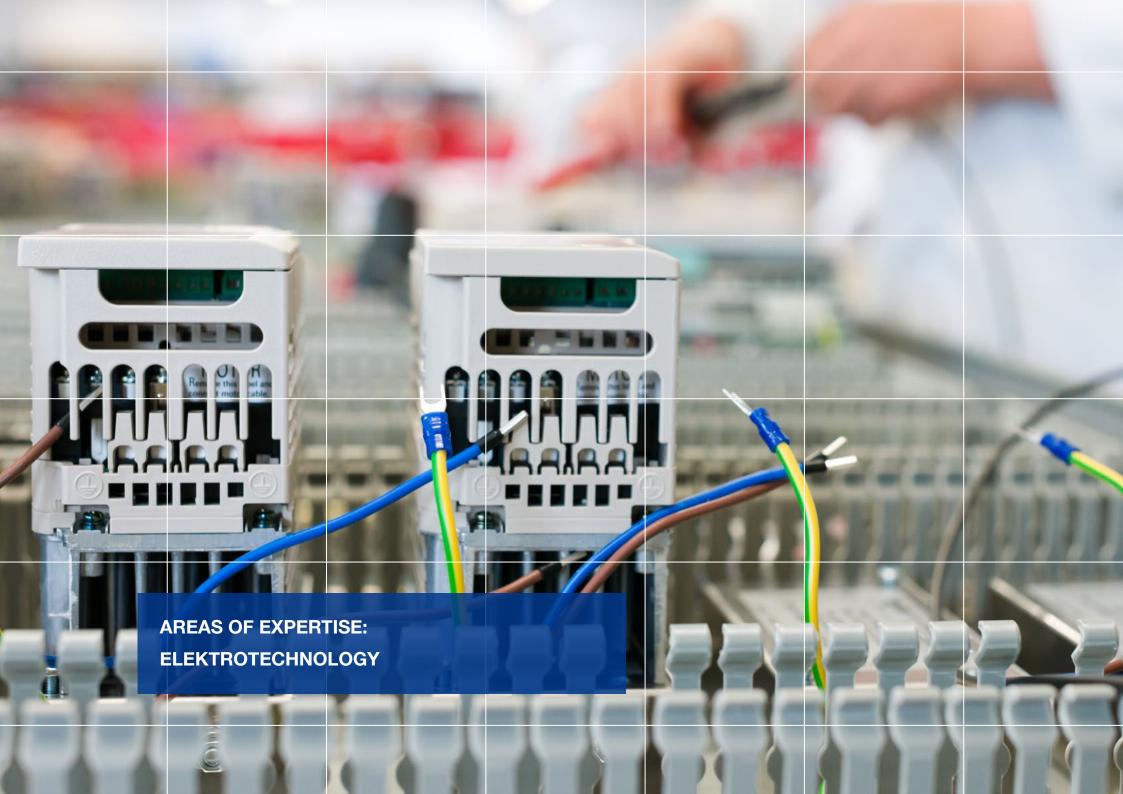
# THT

In a conventional assembly the components are placed on the PCB manually. The components have contact pins which are inserted into holes in the PCBs and are soldered to pads on the opposite side of the PCB by means of a wave solder machine.

#### THE THT- PROCESS

Based on the print design our specialists of the planning department make a detailed drawing of the component set-up on the PCB. This detailed drawing includes corresponding colours, numbers and characters allowing our employees to assemble the PCBs manually. The PCBs are checked visually. "In particular Cimar's diversity of manufacturers and business relations save us a lot of time and, in the end, money." - Decorad Systems





### **ELEKTROTECHNOLOGY**

The electrotechnology department has specialized in assembling control panels and –boxes. Even if it concerns extremely specific cable-wiring, we can manufacture it ourselves. The cable assembly department has the knowledge and the tools to manufacture the most varied connector connections, both mechanically for large quantities, and manually for smaller quantities.

As we produce or assemble many separate processes (PCBs, electrotechnical parts, wiring) ourselves, the processes link up with each other perfectly, allowing the electrotechnology department to assemble a complete final product in a relatively short lead time.

PANEL CONSTRUCTION

The Cimar Electronics specialists can assemble a variety of parts to panels for amongst others the automation industry, such as for example inverters, PLCs, relays, motor controls and security devices. Together with wiring and cabling this is the machine's control. The assembled panels can easily be placed into control units.

#### COMPLETE CONTROL BOXES

We assemble complete control units for for example the Argo- and packaging industry. The intervention of human activities is often completely replaced by automated systems which results into higher volumes, a higher degree of accuracy and cost savings.

"With regard to these panels, we deliberately select a solid and reliable partner nearby, allowing short lines." - Blueprint Automation

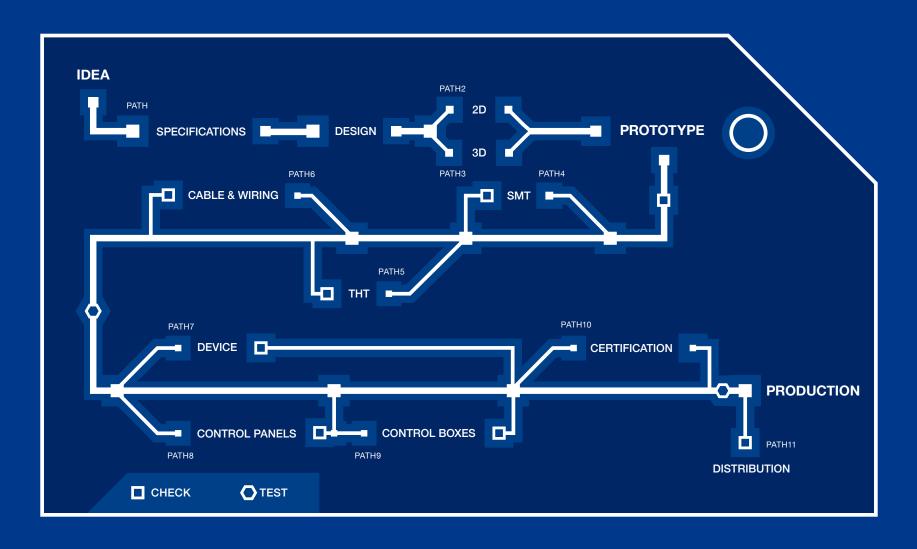
We deliver according to the plug- and- play principle, meaning tested and, if desired, inclusive of external cables. In order to test these control units we develop a test set-up inclusive of, if possible, "live" components (motors, sensors etc.) or we use a simulation program (LABVIEW).



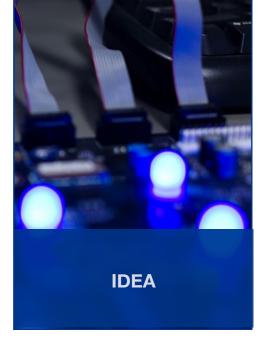


# **■ THE COMPLETE CIMAR PROCESS, AN OVERVIEW**

# LAUNCHING YOUR PRODUCT TOGETHER



Cimar Electronics can carry out any separate part of the process.



Each idea requires a set of assessments in the process to a fully functioning and saleable final product. The product must have certain features to guarantee the desired functionalities. These product features are determined together with Cimar Electronics. Besides, practical feasibility and cost-technical aspects are discussed.

#### PRODUCT FEATURES

In order to avoid unexpected surprises during production Cimar Electronics advises, in this stage of the process, on the correct interpretation of the product to be produced. Product features like functions, costs and certifications are geared to each another in this phase.



Based on previously determined directions with regard to the final product the development specifications are laid down. These specifications are required to give our developers technical and financial frames with regard to the design.

#### **DEVELOPMENT PROCESS**

Based on these specifications Cimar Electronics will start up the next phase. Various internal departments are involved in producing a prototype fast and economically.



The prototype is used to test the various previously determined functionalities. Unexpected deviations are evaluated, reconsidered and if necessary modified before starting the production process.

#### **USE OF 3D-DESIGNS**

Cimar Electronics uses 3D-designs in the development phase. These 3D-files can be used to control a 3D-printer, saving time and money to produce a tangible prototype. It allows us to switch from development and production even more efficiently.



In the design phase, Cimar Electronics already considers testing during or after the production process. If desired Cimar Electronics develops applications on pin screens (assembled prints) or by means of modern, virtual measuring equipment (controls).

#### MANUALS & CERTIFICATION MARKS

Cimar Electronics can deliver your product inclusive of manual, which should be available for any product which requires a CE-mark: We can take care of this CE-mark as well. Besides, we are allowed to produce UL-listed control panels and control units (E217963), meaning marks are applied directly.



Actual production can take place after the test phase. Prior to this production a pilot run might take place to determine the "spread" in your product. If we produce your product for the very first time, you will receive a pre-production model for approval. Full assembly will take place at Cimar Electronics. In this way we have full grip on the realization of your product.

#### LAUNCHING YOUR PRODUCT

The products which are manufactured by Cimar Electronics meet all requirements as determined in the beginning of the process. The final end product is tangible in this phase.



These assembled final products can now be sold to your end users. Cimar Electronics can distribute your product inclusive of certification marks, manuals and packaging.

#### TO THE END USER

Cimar Electronics has sufficient logistics facilities to carry out the entire distribution of your products. The products are checked and, then, packed according to the right conditions. Cimar Electronics will ship them, fully registered and documented, to the end user. We guarantee a professional handling of your order.



# FIELDS OF APPLICATION

#### ON WHICH CIMAR ELECTRONICS IS OPERATING

We develop and assemble products for varying fields of applications, such as the argo-industry, medical sector, fire detection, automation industry and entertainment industry.

#### **MEDICAL INDUSTRY**

The high standards and constant innovation in the medical sector require a high safety- and innovation level of medical products such as rehabilitation equipment.

#### **AUTOMATION**

In our search for better results and efficiency manual labour and natural processes, such as the packaging industry, are replaced by automated systems.

#### **AGRO-INDUSTRY**

In the agro-industry more and more processes are automated in order to optimize results, such as for example advanced incubators and feeding systems.

#### **ENTERTAINMENT INDUSTRY**

The entertainment industry is characterized by modern technological developments, such as laser- and multimedia centers.

#### FIRE DETECTION

Because of the enormous risks and impact of fire, it is extremely important to detect fire as early as possible. The knowledge and technique of Cimar Electronics is applied in the development, production and distribution of flame detectors.

# **CERTIFICATIONS**

#### **OUR QUALITY STANDARD**



#### ISO 9001:2008

Cimar Electronics complies with the ISO 9001:2008 certification to the standard laid down for the quality management system of an organization.



#### ISO 13485:2003

Cimar Electronics complies with the ISO 13485:2003 certification to the quality requirements for the production of medical devices and related services.



#### IPC-A-610

Cimar Electronics complies with the IPC-A-610 certification to the most widely used electronics assembly standard in the world.



#### IPC/WHMA-A-620

Cimar Electronics complies with the IPC/WHMA-A-620 certification to the international applicable acceptance requirements of cable- and wire assembly.



#### **UL- CERTIFICATION MARK**

Cimar Electronics is entitled to assembly and deliver control panels which meet the UL-certification mark.





# **■ CONTACT INFORMATION**

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