



The META E² F team:

7 employees in the logistics department process

- hundreds of quotations,
- all purchase orders from customers,
- all necessary orders placed with suppliers each year.

Around 30 staff members in our manufacturing department produce, test and package

- a total of 1.5 million finished products (over 1,500 different ones)
- from over 9,000 different components parts
- in our 1,800 sqm production and storage area.

We work as a closely knit team and use

- innovative production equipment,
- modern IT systems and high-performance software,
- a lean organization and certified QM system

to ensure that

- customer requirements in terms of design, product quantity and delivery deadlines are satisfied with a high level of flexibility,
- products are manufactured correctly, on schedule and at fair market prices.

Unique qualities and strengths

- High level of commitment and dedication
- Open-minded approach and high flexibility
- Polite and professional attitude towards customers and suppliers
- Openness to criticism and willingness to constantly improve, both internally and externally
- Strong team spirit and close cooperation with customers

... and that's far from all!

Management

Tel.: +49 (0)7720-969487-41

Cable Products Team

Order Management

Tel.: +49 (0)7720-969487-43

Sales/Shipment

Tel.: +49 (0)7720-969487-45

Accounting

Tel.: +49 (0)7720-969487-40

Development

Tel.: +49 (0)7720-969487-46

Sales

Tel.: +49 (0)7720-969487-44

Tel.: +49 (0)7720-969487-41

Electronic Products Team

Order Management

Tel.: +49 (0)7720-969487-30

Sales/Shipment

Tel.: +49 (0)7720-969487-42

Human Resources

Tel.: +49 (0)7720-969487-42

Quality Management

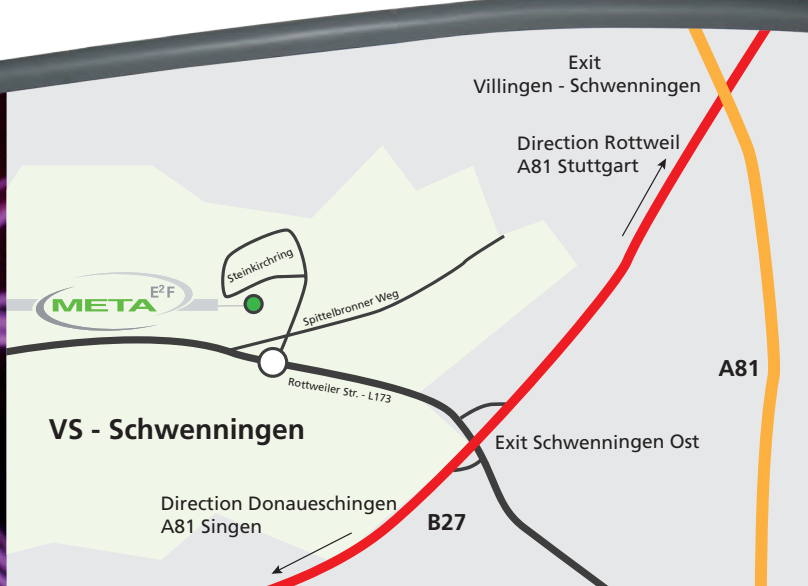
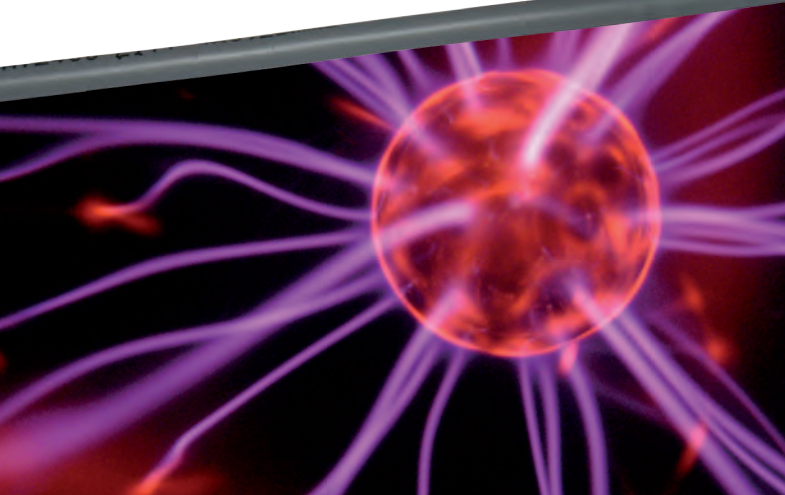
Tel.: +49 (0)7720-969487-38

To discover the faces behind the phone numbers, please visit:

www.meta-e2f.de



Sparking connections



META E² F GmbH
 Steinkirchring 74
 78056 Villingen-Schwenningen
 Germany
 Tel.: +49-(0)7720-969487-0
 Fax.: +49-(0)7720-969487-13
 E-mail: info@meta-e2f.eu
 www: www.meta-e2f.de

Development

Assembled wire strands, electronic modules or finished electrical equipment - we are here to help you translate your ideas into manufacturable products.

Our strengths are:

- selecting the right component parts and materials,
- translating concepts into layout,
- developing components and modules.

We document your products on 2D/3D mechanical and state-of-the-art electronic CAD stations and merge our many years of development experience with our in-depth know-how in manufacturing technology. This enables cost-effective production of high-quality products with excellent functional reliability.

Sourcing

High flexibility in the sourcing of materials on behalf of our customers is an essential requirement for on-schedule delivery. Over the years, we have built a strong network of suppliers to ensure fast and cost-effective procurement of materials to the benefit of our customers. We have established partnership-based relationships with our suppliers and can choose from a wide range of national and international sources. Of course, we can also process customer-supplied materials. This is handled just as professionally as the purchase of materials from our suppliers. In addition to our network of suppliers of component parts and materials, we are happy to cooperate with highly efficient manufacturing contractors in the metal and plastics processing industries and other sectors. This enables us to offer an extended range of manufacturing solutions that ideally complement our in-house processes.

Organization

The success of our highly flexible and committed team is based on the following factors:

- lean organization,
- single points of contact for costumers,
- use of a powerful ERP system.

With our state-of-the-art information technology, we are able to control the entire flow of materials and values throughout the product realization process. This ensures that purchase orders from customers are processed promptly and efficiently.

The commitment to quality within our organization is evidenced by:

- QM system certified to DIN EN ISO 9001 (as amended),
- consideration of environmental aspects,
- assembly of UL-approved cables and wire strands to UL 764 requirements,
- production of UL-approved electronic products,
- customer-specific manufacture of ATEX-compliant products.

Manufacture

We offer a broad spectrum of manufacturing solutions and services at our premises. Depending on customer requirements, we manufacture complete electrical products or individual components.

Our key technologies are:

- manufacture of electronic products,
- cable assembly,
- electric assembly and installation.

Manufacture of electronic products:

Automatic surface mounting of components on printed circuit boards with flexible and powerful Mydata pick-and-place machines, complemented by the manual assembly of through-hole components, are processes that play a crucial role in the manufacture of many of our products.

High-speed automatic surface mounting combined with exceptional flexibility and short retooling times enable us to meet customer requirements in terms of fast delivery and efficient production even for small volumes.

Range of equipment employed (list not exhaustive):

- 2 Mydata pick-and-place machines
- 2 state-of-the-art Essemtec paste printers, 2 SMT paste printers for samples and small production volumes
- 2 Asscon vapour-phase soldering systems
- 1 SEHO 8140 lead-free wave soldering system
- 1 EBSO SPA 250 selective soldering system
- 1 Mirtec AOI system and Lynx microscopes with large viewing area
- Various functional testing and laboratory equipment
- 2 polyurethane potting systems
- 1 Branson 920+ ultrasonic welder
- 1 hotmelt molding station Dura Blue for smaller batches
- 1 W. Wirth TM2500 hotmelt molding station
- 1 ERSO 550 computer controlled Rework station

Cable assembly:

Wire strands, wire harness and fully assembled cables can also be manufactured in small and medium volumes and with UL approval, if requested.

We employ a broad spectrum of tools for the production of the most diverse cable products to specific customer requirements:

- Automatic cutters, strippers and sheath removal tools
- Crimping tools, presses to industry standard
- Tools for the production of flat-band cables
- Cable pinout testers, crimp height measurement devices and pull force testers
- Cable and wire marking printers

Electric assembly & installation – Product completion:

In the production of complete modules or finished products, we use state-of-the-art assembly stations along with innovative technologies for the safe “packaging” of electronic modules:

- Polyurethane potting of about 50,000 modules per year
- Conformal coating of modules, especially for moisture protection
- Hotmelt molding of electronic devices, wire harness and cables
- Ultrasonic welding – fast and accurate sealing of plastic enclosures
- Screw and punching technology for machining and mounting of plastic and metal enclosures
- Safety testing technology to VDE 701/702 and EN 60204 requirements

Some examples from our product portfolio:

Proportional amplifier for hydraulic valves

- Proprietary product – for installation on mounting rails, 12-24 V, max. 2.4 A

Assembled, programmed and function-tested module for the control of electric actuators

- Electronic manufacturing service
- Multi-layer, SMT on both sides and assembly of through-hole components, display and buttons

UL-approved production of wire harness and cables for full equipment cabling

- Customer-specific cable assembly
- Set of about 50 different wire strands and cables

Complete digital controller for high-end electric screwdriver

- Multi-layer, SMT on both sides and through-hole components, wire harness
- Programmed, function-tested and calibrated
- With display and jog dial in aluminium enclosure
- Packaging printed to specific customer requirements for shipment to end customers

“Light Tower” lighting solution for construction sites, outdoor events, accident sites, etc.

- Inflatable tube, can be inflated with a turbine to a height of up to 5 m
- Max. 1,200 W, lighting coverage up to 20,000 sqm
- Portable, can be carried by two persons, approx. size when collapsed 45 x 60 x 50 cm, 30 to 37 kg

