

The logo for MTS Systemtechnik features the letters 'MTS' in a large, bold, blue sans-serif font. Below 'MTS', the word 'Systemtechnik' is written in a smaller, bold, black sans-serif font. The logo is positioned on the right side of a white background, with a decorative pattern of thin, parallel grey lines on the left side that tapers towards the top right.

MTS
Systemtechnik

// Competence Quality Reliability



Your partner company for customised solutions - "Development, Production & Service" all from one source.

- // High-frequency technology
- // EMC technology
- // CNC milling technology



// *The Company*

Development and manufacture of customised products

Telecommunications industry

An important sector is the telecommunication industry for which we manufacture Shielding Boxes, Relay Switch Units, Standard Coupling Units and Air Interface Adapters (Air Interface Emulation). For the control of our devices and systems, we offer software solutions and integrate desired programm sequences.

High frequency and measurement technology

Our high frequency components include e.g. programmable attenuators, semiconductor switches, hybrid couplers, power dividers, RF filters, coaxial relays, etc.

For EMC measurement technology we sell relay switching units and other accessories.

CNC milling technology

We produce high-precision milled parts in our modern CNC production centres. From prototypes to series production, especially according to customer specifications. Our mechanical product range also includes standard aluminium enclosures such as profile enclosures, milling cassettes and 19" racks.

// *The Company*

The company history at a glance

Foundation of MTS Mikrotechnik
as a developing and producing
company in the field of EW

1980

1995

2005

2020

Relocation of the company
into a new company building
in Mertingen

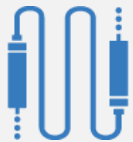
Change of the company name
MTS Mikrotechnik to
MTS Systemtechnik with
new shareholders

25 years of MTS Systemtechnik

// *Main products*



Systems for the distribution of LF, video and RF signals in the fields of tele- and satellite communication as well as radio surveillance.



Development and production of active and passive components for high-frequency technology



Manufacture of mechanical components for the aerospace, high-frequency and optical industries

// *Company facts*

Operating area
1800 m²
(can be enlarged
to 2800 m²)

Employees
50 employees in full
and part time, consisting
of engineers, technicians,
skilled workers and trainees

Training

- Electronics technician (m/f/d)
for devices and systems
- CNC cutting machine
operator (m/f/d)
- Industrial clerk (m/f/d)

// *Company facts*



DIN EN ISO 9001:2015 certified
(Development, production, distribution)

Modern measuring devices

Modern machines



// **Competences**

- // In-house development, simulation and production of high-frequency components and systems
- // Software and hardware laboratory
- // System integration
- // EMC absorber chamber
- // CAD services
- // CNC machining centre
- // Modern production processes
- // Quality standard DIN EN ISO 9001

// *Our markets*



Our customers are developers and manufacturers of highly sensitive equipment in the market sectors of mobile communications, telecommunications, aerospace, defence technology, medicine, automotive and electronics.

MTS Systemtechnik represents the highest technology, absolute reliability, discretion, transparent processes and certified quality.

// *Development and construction*

- // Own development department (hard- and software) with development engineers (high-frequency technology, electrical engineering, software)
- // Development and design of own products, complex devices and systems up to individual components
- // Development of operating and control software, firmware etc.
- // Circuit board plotter for development evaluation in circuit board design in the shortest possible time
- // 3D CAD designs in a modern software environment for complex devices and systems, components and mechanics
- // 3D printer for initial samples
- // Product test in our own EMC absorber chamber

// ***Electronic manufacturing***

- // Production of individual printed circuit boards
- // Assembly of the units and systems
- // Cable assembly (coaxial cable)
- // Production and assembly of components
- // Examinations and tests of the individual products
- // Electronic measurement
- // Creation of test protocols
- // Extended workbench as a service

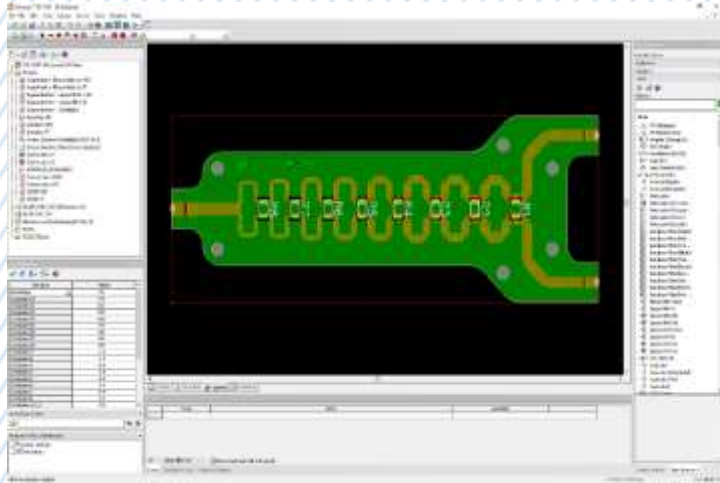
// *Mechanical manufacturing*

- // CNC milling centre with seven different milling machines
- // Milling of single pieces up to series production possible
- // Milling of high-precision components and parts
- // 3D coordinate measurement
- // Milling of different materials (e.g. aluminium, steel and polymer (POM))
- // Surface treatment
- // Extended workbench as a service

// *Innovation and development*

- // Targeted further and new development of own components, devices and systems for high-frequency and microwave technology
- // Continuous market analysis in the targeted areas of activity and close exchange between sales and customers (identify future needs in good time)
- // Push for in-house development and production (better availability, independence and further training)
- // Improving development methods and prototyping (RF layout programs, milling instead of etching, etc.)
- // Further training of the workforce through own RF training courses

// Modern resources



- // Modern software environment with Keysight Genesys, Pulsonix circuit board design, Visual Studio etc.
- // Circuit board plotter for rapid development evaluation in circuit board design (LPKF S103)
- // Development boards for contemporary hardware and software programming (Raspberry Pi 4 Model B and Cora 7: Zynq-7000)



// Components

- // In-house development, simulation and production of high-frequency and microwave components
- // Power divider
 - Wilkinson and Resistive
- // Semiconductor attenuators
 - 95 dB / 122 dB attenuation
- // Semiconductor switch
 - 2s, 4s & 8s with ≥ 100 dB isolation
- // Coupler
 - Directional coupler & 3 dB Hybrid
- // Level detectors
 - 5 to -65 dBm dynamic range
- // Passive filter modules
 - USB 3.1 Gen2 & Gigabit-Ethernet
- // etc.



// *Devices and systems*

- // Over 90% of MTS devices and systems consist of the company's own component developments
- // Power divider units - DC to 8000 MHz
- // Attenuator units - 1 MHz to 8000 MHz
- // Air Interface emulations - 1 MHz to 8000 MHz
- // Coupling units - 380 MHz to 6000 MHz
- // Switching matrices - 1 MHz to 6000 MHz
- // Shielding boxes - 380 MHz to 6000 MHz
- // etc.

Ready for the future -
Ready for new technologies

5G



MTS Systemtechnik
Test solutions



// *System solutions*

The sensitivity of mobile devices has increased dramatically in the last year. 4G or 5G devices can detect up to -130 dBm, NB IoT applications even up to -145 dBm. Very high RF shielding is required to test these technologies under defined conditions. MTS rack systems are a solution that offers about 120-140 dB. The main features are a shell-type enclosure, filtered interfaces, adapted RF cabling and complete installation in and on the facility.

- // MTS 19" rack system
- // Integrated fans in the roof
- // Connection panel in the roof for RF connections
- // Connection panel on the back for feedthroughs

// Autonomous solution
for radio measurements
and monitoring



// *Measuring vehicle*

The autonomous solution for mobile, measuring, monitoring and communication vehicles

S
T
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Universal equipment carrier

5G

All types of radio measurements

Radio optimisation

Benchmarking

Troubleshooting / Debugging

IMSI Catcher

Optional radio direction finder

authorities and organisations with security tasks applications

Self-sufficient power supply, can be used almost anywhere

// **Measuring vehicle**

Further application possibilities:

- // Jammer Technology
- // Drone defence
- // Monitoring
- // Wiretaps



// Main customers



// Representatives



PR of China - ATS Technology



United Kingdom - Elion Electronics



Finland - Signal Solutions Nordic



France - Tael Electronique



Italy - DELO Instruments



Malaysia - Test Measurement & Engineering



Portugal - BridgePoint



Romania - Distek Instrumente de masura



Sweden - EMP-tronic & Proxitron



Spain - Sematron Espana



South Korea - Siwon International



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