

Overview of our services:

- HALT (Highly Accelerated Life Test)
- EMC (Electromagnetic Compatibility) Testing
- Power System Simulation

Comprehensive testing of new product developments has been offered by the TRUMPF Hüttinger Test and Qualification Center (TQZ) since July of 2012. Through the TQZ, we are able to individually test our process power supplies during development, perfectly preparing them for use by our customers.

You too can utilize this advantage, reducing development costs and saving time with initial product qualification tests. With more than 1,000 m² of space, you can put your products through their paces before introducing them to the market.

Once the respective tests have been conducted, you receive a test report from us which can either be used for the CE manufacturer's declaration or to document the reliability of your product design.

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HALT

Highly Accelerated Life Tests (HALT) can be carried out in the THERMOTRON AST-165/RSL-48 test chamber.¹ These accelerated aging tests reveal possible weaknesses or design errors in assemblies early on. The simulation of accelerated aging is achieved by means of extreme temperatures and vibration. Based on the HALT results, the product design or production process can be optimized to improve product reliability.

Characteristics of the HALT chamber:

Vibration	
Max. level	50 Grms
Spectrum	2 Hz – 10 kHz
Axes Excited	3 Linear 3 Rotational

Workspace Dimensions	
Width	137 cm
Depth	142 cm
Height	239 cm
Max. Payload	700 kg

Temperature	
Min.	-100 °C
Max.	+200 °C
Change Rate	> 70 K/min
Airflow	2830 L/s
Heater	108 kW
Cooling	LN

¹For safety reasons, support our personnel is included in the services that are offered.

Additional information and pricing are available upon request.



EMC

We offer various tests for electromagnetic compatibility (EMC) within the scope of the manufacturer's declaration according to Directive 2004/108/EG/EC/CE:¹

- Conducted emission: 150 kHz – 30 MHz
- Radiated emission: 9 kHz – 1000 MHz
 - According to CISPR16
 - Open area test site with 10 m measuring distance
- Immunity according to:
 - EN61000-4-2
 - EN61000-4-4
 - EN61000-4-5
 - EN61000-4-6

Characteristics of our equipment:

- Turn table with a 4.5 m diameter and 3 t capacity
- Cooling water with max. 500 l/min flow rate
- 3-phase power supply, multi level
200 - 520 V 650 A / 450 kVA
(200/207/220/380/400/420/440/460/480/500/520 V)
- Line Impedance Simulation Network (LISN) up to 400 A rated current handling capability (3-phase)
- Coupling / decoupling networks with up to 100 A rated current handling capability



Power System Simulation

Various standardized tests can be performed with our Spitzenberger & Spiess PAS 25000 power system simulation with three 4-quadrant amplifiers.¹

4-quadrant amplifier features:

P _{duration}	75 kVA
P _{short time}	150 kVA
P _{peak}	630 kVA
Voltage	0...135 Veff , 0...270 Veff, 0...320 Veff
Frequency	DC to 5 kHz Small signal to 100 kHz

Special features of this system:

- High peak loads and very low internal resistance
- Straightforward standardized testing due to pre-configured test procedures
- Simulation of harmonics and network phenomena, freely configurable
- Measured (oscilloscope) or simulated gradients are transferable