

## MAGNETIZER

The device is intended for magnetization of the permanent magnet segments.

**Device No.:** 76949  
**Manufacturer:** MAGNET PHYSIC Dr.Steingroever GmbH  
**Name / Type:** JM 3030 MP



### The device enables:

- With different magnetizing heads, it is possible to magnetize various magnetic materials (strontium ferrite, rare earths...).

### Technical data:

- Fluxmeter Magnet-Physic EF11
- Fluxmeter Magnet-Physic EF 3
  
- maximum voltage: 3kV
- maximum current: 30kA
- maximum energy: 3000Ws

## SCHAFNER SURGE PULSE GENERATOR

is a modular system, by which we can test transient immunity based on ISO 7637. The generated pulses simulate different interferences, which occur during the functioning of a vehicle.

<b>Device No.:</b>	<b>77243</b>
<b>Manufacturer:</b>	<b>SCHAFNER</b>
<b>Type:</b>	
NSG 200 E	Main frame
NSG 222A	Interference simulator 5/100 $\mu$ s, sym, asym Ri=50 $\Omega$
NSG 506C PartII	Capacitor
NSG 506C PartI	Load dump / Field decay simulator
NSG 500B/11	Interference generator
NSG 500C	Interference generator



### The device enables:

- Immunity testing of EUT for automotive voltage variations.

### Specifications:

- ISO 7637

## TEMPERATURE CHAMBER WITH AN EMBEDDED DRIVE FOR ALTERNATOR TESTS

This is a temperature chamber with an embedded drive, electronic load, adjusting fixture, measuring system and PLC controller.

**Device No.:** 77116  
**Manufacturer:** LTdoo  
**Name / Type:**



### The device enables:

- active thermal cycling of one alternator by the desired parameters, which includes electric loading in the requested climate conditions
- endurance alternator tests in extreme temperature conditions.

### Technical data:

- Temperature chamber:
  - Volume 0.6m<sup>3</sup>
  - Temperature range: -50°C to +180°C
- Drive
  - Driving motor output: 1.5kW
  - Driving motor rotational speed: 0 – 3000min<sup>-1</sup>
  - Alternator rotational speed: 0 – 5000min<sup>-1</sup>
- Electronic load 12/24V : 150A

### Specifications:

- Iskra Avtoelektrika specifications
- Customers specifications

## TEMPERATURE CHAMBER

This is an autonomous temperature chamber.

**Device No.:** 77275  
**Manufacturer:** HERAEUS - VÖTSCH  
**Name / Type:** VMT 07/35



### The device enables:

- Tests of materials and products at variable temperature cycles and constant humidity.
- Time of duration and temperature conditions can be set by a programme or manually.

### Technical data:

- Temperature range: -70°C to +180°C ±1°C
- Heating speed: 4.5K/min
- Cooling-down speed: 3.5K/min
- Volume 35l

## SALT SPRAY CHAMBER

with an embedded drive to determine the corrosion resistance of different materials in compliance with the below listed standards.

**Device No.:** 77897  
**Manufacturer:** ADVEST KOHLER  
**Name / Type:** HK500



### The device enables:

- tests of products, materials, and protections in neutral and aggressive salt spray atmosphere
- programme or manually pre-set cyclic tests of products operation in salt spray chamber or SO<sub>2</sub> atmosphere

### Technical data:

- Chamber volume: 500l
- Chamber/salt spray temperature: 23 – 55°C
- Temperature regulation in the chamber: ± 1K
- Chamber heating: indirectly through the cabinet walls
- Drive:
  - Asynchronous motor: 3kW
  - Drive rotational speed: 50 – 3000min<sup>-1</sup>

### Standard:

- ASTM B117
- DIN 50021 SS
- DIN 50018 v SO<sub>2</sub>
- ISO 9227
- DIN 50021 CASS
- ASTM B368
- VDA 621-415
- P-VW1210 oWL
- P-VW1210 mWL
- programme in compliance with the user requirement

## THERMAL SHOCK CHAMBER

This is an autonomous thermal shock chamber.

**Device No.:** 77945  
**Manufacturer:** FEUTRON  
**Name/Type:** FEUTRON



### The device enables:

- Accelerated ageing of EUT with a rapid temperature change at the constant humidity. Transitions between temperatures occur within 15 seconds.
- Tests of material and products with cyclic settable time change of temperature at the constant humidity.
- Duration time and temperature conditions are controlled manually or by a programme.

### Technical data:

- Volume: 160l
- Cold chamber:  $-75^{\circ}\text{C}$  to  $+180^{\circ}\text{C} \pm 1^{\circ}\text{C}$
- Hot chamber:  $+10^{\circ}\text{C}$  to  $+200^{\circ}\text{C} \pm 1^{\circ}\text{C}$
- Transition time  $\leq 10\text{sec}$

### Specifications:

- DIN EN 60068-2-14 Na, Nb
- MIL StD 883 D Meth. 1010.7, 1011.9
- IPC-TM-650
- by a programme in compliance with the user requirements

## TEMPERATURE CHAMBER WITH HUMIDITY

is a climate chamber with an embedded drive.

**Device No.:** 101431  
**Manufacturer:** VOTSCH  
**Name / Type:** VC4034



### The device enables:

- test of samples at the desired temperature and humidity in a specified time period
- active test of alternators at the specified humidity and temperature

### Technical data:

- Chamber volume: 350l
- Range of temperature without humidity: -40 – 180°C
- Temperature regulation in the chamber: ± 1K
- Humidity range: 10% - 98%RH
- Range of temp. for humidity: +10 – 95°C
- The embedded drive power: 3kW
- Drive rotational speed: 500 – 3000min<sup>-1</sup>

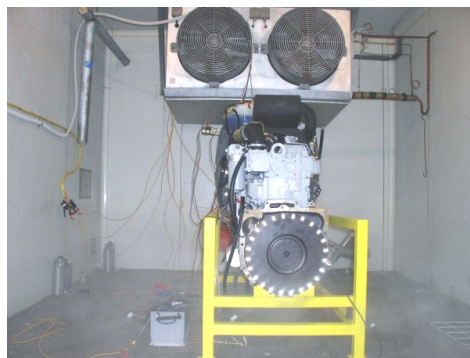
### Specifications:

- DIN 50016
- IEC 68-2-3
- IEC 68-2-30

## COLD CHAMBER

Cold chamber is equipped for different tests of thermal motors cranking and other types of drives at low temperatures.

**Device No.:**  
**Manufacturer:** ISKRA AVTOELEKTRIKA  
**Name / Type:** COLD CHAMBER



### The device enables:

- tests of starter motors on thermal motors at low temperatures
- with or without thermal motor ignition
- low temperature tests of AC/DC drive units

### Technical data:

#### Chamber:

- Temperature range: +23 to -40 °C
- Temperature regulation in the chamber  $\pm 1K$
- Chamber dimensions (l x w x h) 3000mm x 4000mm x 2500mm
- Cooling power at ko/tk -40 / -40°C: 4890W
- Condensing power: 8840W

#### Measuring equipment:

- Data acquisition system Agilent, 34970A
- Pulse counter Agilent, 53131A
- special software ISKRA
- current probe LEM LT 2000, range 0-2000A
- thermocouple J-type, K-type

#### Standards:

- QAE 11.920.209
- Customers specifications

## **Rapid prototyping and short production runs of plastic parts by the technology of selective laser sintering – SLS**

The use of 3D modelling and technologies of rapid prototyping is crucial for reducing the time from an idea to the serial production of new innovative products.

Iskra Avtoelektrika introduced a process of rapid prototyping of plastic parts based on the 3D modelling and technology of selective laser sintering. The final result is a completely functional product.



The unit for the SLS producer EOS type EOSINT P385 enables manufacture of plastic products of any shape and size up to 340mm X 340mm X 620mm with temperature resistant up to 120 degrees Celsius.

If you would like to know more about the new technology and/or the actual production of a certain product, feel free to contact Mitja Klančič by phone +386 5 3393 695.

## ANECHOIC CHAMBER



### Capabilities:

- Sound measurements in the free field
- Sound power estimation
- Driving and loading of electrical machines up to do 15 kW

### Technical data:

- Dimensions: 4 m × 4.45 m × 5.1 m
- Cut-off frequency 80 Hz
- Chamber volume 90.8 m<sup>3</sup>
- Maximum size of the specimen 0.45 m<sup>3</sup>
- Software LMS Test.Lab
- Frontend LMS SCADAS III (16 channels)  
LMS SCADAS Mobile (8 channels)

### Standards:

- ISO 3744, 3745
- ISO 7779
- ISO 9614-1
- ISO 9614-2

**ELECTRODYNAMIC VIBRATOR      LDS V875**



**Capabilities:**

- Sine testing
- Random testing
- Shock testing
- Combined testing – Sine on Random

**Technical data:**

- Maximal force: 35.6 kN
- Maximal acceleration: 110 g
- Maximal load: 600 kg
- Slip table size: 750 mm × 750 mm
- Head size: 440 mm
- Frequency range : up to 3000 Hz

**Standards:**

- IEC 60068-2-6
- IEC 60068-2-27
- IEC 60068-2-32
- IEC 60068-2-64
- MIL-STD-810F
- JIS D 1601