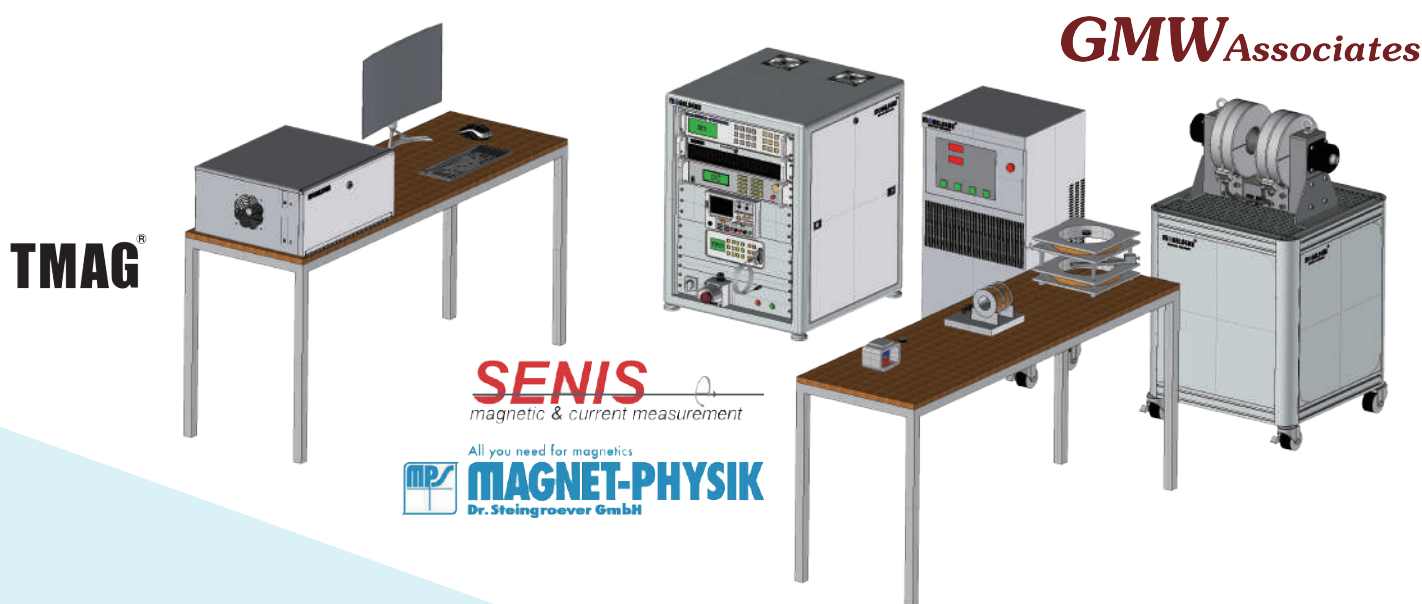


Single-Axis and 3-Axis

The Magnetic Field Calibration System with High Precision and Sensitivity AC/DC

單軸/三軸 標準穩定電磁場產生源校正系統 AC/DC



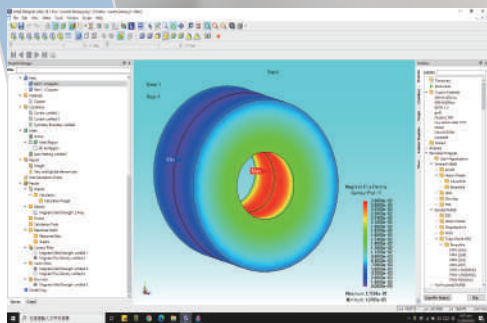
創磁微測提供各種標準磁場產生源的高精準磁性校正系統設備，依照客戶的需求提供 AC/DC 單軸及三軸解決方案。全自動化的圖控式人機介面軟體精準控制系統的電磁場強，具有極佳的量測精度及高穩定性。

Mobilsens Technologies provides high-precision magnetic calibration system equipment with various standard magnetic field sources, our best magnetic solution for customer requirement is AC/DC single-axis and 3-axis. The fully automated graphical HMI software accurately controls the electromagnetic field strength of the system, with excellent measurement accuracy and high stability.

Features 特點

- ◎ Two DC current standard sources can achieve the best precision control, programmable automatic current can achieve the best linear output, corresponding to Helmholtz coil .
- ◎ The world's top magnetic equipment is selected to make the system have the highest precision magnetic field monitoring and stable magnetic field correction source.
- ◎ The integrated magnetic system design includes a human-machine interface and a simple system cabinet configuration, which is intuitive and convenient to operate.

提供高準確度及高穩定度的磁場量測環境，全自動磁場參數監測及校正補償偏移系統控制，非常適合用於磁性探棒及地磁IC等磁性感測元件的量測校正使用。



Electromagnetic simulation

- Analysis of the distribution characteristics of magnetic flux under different time-varying
不同時變磁場下的磁力線分布特性分析
- Analysis of magnetic flux density characteristics of soft magnetic alloys and magnet sources
軟磁合金與磁源的磁通量密度特徵分析
- Modeling analysis of electromagnetic sensing distance and mechanism design tolerance
電磁感測距離與機構設計公差的建模分析

3MH6 HIGH PRECISION, LOW-NOISE TESLAMETER

高精度低雜訊的多軸高斯計量測系統

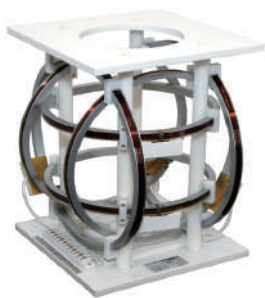


3MH6 TESLAMETER

- Teslameter with integrated 1-, 2-, or 3-axis Hall Probes (Bx, By, Bz)
具有整合x-y-z 3軸向的標準霍爾探棒
- Measurement of DC & AC magnetic fields
量程範圍包含交直流的電磁場強
- Frequency bandwidth: DC – 2.5kHz (-3dB)
頻寬from DC to 2.5 kHz (-3dB)

THREE AXIS HELMHOLTZ COIL SYSTEM

三軸高精度亥姆霍茲量測線圈系統



MS300-3_3 AXIS COIL

• Field/Current ratio	Approx. 500 μ T/A (5.00 Gauss/A; 398 Am/A), for each X, Y or Z pair. Error: $\pm 1\%$, maximum.
Maximum field	2.0 mT (20 Gauss) in a permanent manner for each pair. Around 3.0 mT (30 Gauss) during 2 minutes.
Maximum admissible current	4.0 A in a permanent manner for each pair. Around 6 A for 2 minutes.
Isolation voltage	250 V DC minimum, in between windings and forms and in between coil pairs. Tested: at 500 V DC ($R_{\text{isolation}} > 2 \text{ G}\Omega$).
Field homogeneity	Differences smaller than $\pm 1\%$, in respect to the centre, in a spherical volume of 70 mm in diameter, coils centred. Differences smaller than $\pm 5\%$ in a spherical volume of 100 mm in diameter. These volumes to 1% and 5% are larger on some directions.
Orthogonality error	$< \pm 0.2^\circ$.
Connections	Terminal block with 4 mm (M4) screws.
Max. working temperature	80 °C for the coil-set. 100 °C for the windings.
Coils section	Windings: 8.5 x 10 mm, maximum. Total (forms): 10 x 13 mm.
Materials	Windings in enamelled copper wire and epoxy resin filled. Coil forms in aluminium alloy. Coil terminals plates in epoxy resin/glass fibre (FR4) with covers in PVC. Lower and upper support plates in foamed PVC. Supporting pillars and brackets in Acetyl. Screws in brass and Nylon.
Maximum dimensions	Height 364 mm x Width 309 mm x Depth 276 mm.
Weight	5 kg
Accessoires	Measuring Report

High Magnetic Field Electromagnet

高低磁場可調電磁場產生源系統



5403 Dipole Electromagnet

Coils (series connected)

Resistance (20°C)	0.45 Ω
Max Resistance	0.55 Ω
Max Continuous Power (air cooled)	20A, 10V, 0.20kW
Max Peak Power (air cooled)	40A, 20V, 0.8kW 4min max on, 12 min off
Water Cooling (At nominal 18°C. Allowed range 15°C to 25°C non-condensing.)	2 liters/min, 1 bar (0.5 US GPM, 16 psid)
Max Continuous Power (water cooled)	50A, 25V, 1.25kW
Max Peak Power (water cooled)	70A, 33V, 2.5kW 10min max on, 20 min off