MagQu 變頻磁導分析儀/磁性濃度分析儀

XacQuan/MagQuan

變頻磁導分析儀
磁性濃度分析儀

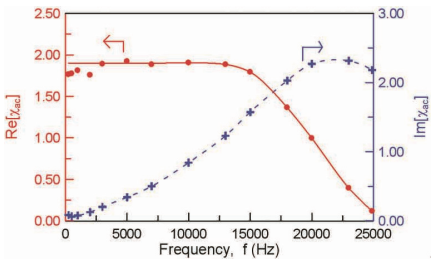
MagQuan II

XacQuan II

MagQuan V/XacQuan V

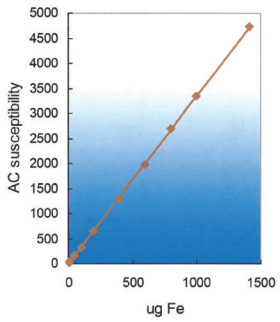
產品特色

- 快速定量: 每個樣本僅需30秒
- 再現性高: CV%<1%
- 多功能: 固態與液態樣本皆適用
- 操作簡單, 樣本無須前處理即可測量
- 定量完樣本可回收使用, 不浪費
- 測量磁性物質濃度, 避免包覆物/混合物影響質量與體積
- 靈敏度: ~ 5 μg Fe 或 0.001 emu



應用

- 磁性物質濃度測量- 可應用於核酸純化磁珠, 煉鋼/粉末冶金鐵鈷鎳定量
- XacQuan II/V可以量測樣品的交流磁導率, 解析其實部、虛部
- 學術研究應用



規格比較表

型號	交流磁場頻率	樣本體積	交流磁場振幅強度	尺寸
XacQuan V	50~24900 Hz	0.5~5 ml	10 ~200 mGauss	(W) 36 cm (H) 17 cm (D) 22 cm
MagQuan V	16~17 kHz	0.5~5 ml	< 50 Gauss	(W) 36 cm (H) 17 cm (D) 22 cm
MagQuan II	50~24900 Hz	0.1~0.2 ml	10 ~200 mGauss	(W) 21 cm (H) 10 cm (D) 18 cm
XacQuan II	16~17 kHz	0.1~0.2 ml	< 50 Gauss	(W) 40 cm (H) 32 cm (D) 14 cm

➢ 透過USB 接線與電腦連接, 分析軟體於 Windows 系統下作業
➢ 提供軟硬體客製化服務

勝博國際集團 SUNPRO INTERNATIONAL INC

台北 勝綻科技 Tel:02-8791-8971 | 台中 勝瑋科技 Tel:04-2298-0365 | 高雄 勝騏科技 Tel:07-338-5550

MagQuan V 磁性分析儀

台塑越南河靜煉鋼廠採購本公司磁性分析儀XacCum進行燒結礦含鐵量分析，於2020年11月順利完成裝機驗收；新一代磁性分析儀MagQuan V為XacCum升級版，最大量測鐵含量可達11 g。

優勢

- 30秒內即可完成定量，高精密度 (CV%< 0.5%) 快速，每個樣本僅需約30秒
- 最小樣本體積1 ml
- 固態與液態樣本皆可測量
- 總公司位於台灣，提供零時差與高效率的技術支援與軟硬體客製化服務；中文台語皆可溝通，避免溝通誤會

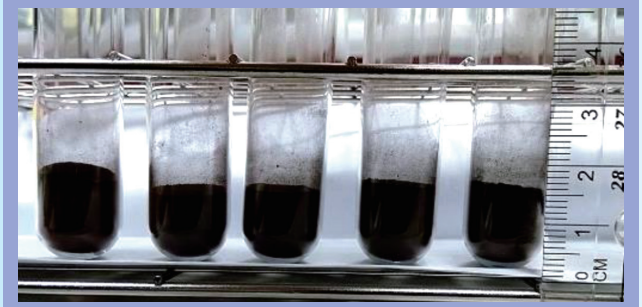
服務項目

- ✓ 產品教育訓練與訓練證書
- ✓ 品質證明文件
- ✓ 定期維護保養與確效
- ✓ 軟硬體客製化與系統整合
- ✓ 玻璃試管等耗材

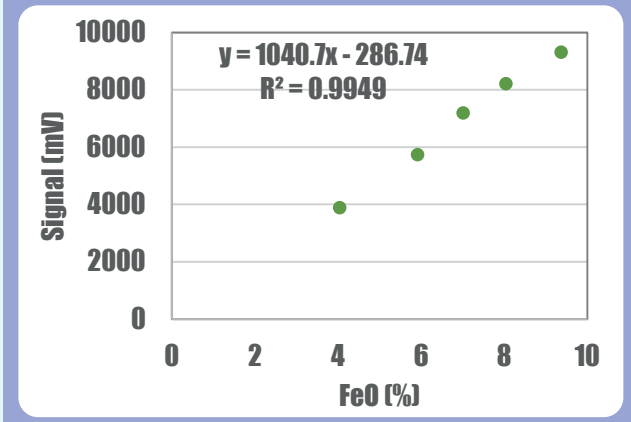
台塑越南河靜煉鋼廠應用實例

MagQuan V磁性分析儀規格

- 尺寸 : (W)36 cm x (H)17 cm x (D)22 cm
- 輸入電壓 : 50 Hz/60 Hz, 100-240 V
- 樣本體積 : 1~5 ml
- 交流磁場頻率 : 16~17 kHz
- 解析度 : 0.5%Wt
- 透過USB 接線與電腦連接，分析軟體於 Windows 系統下作業



取1~5 ml燒結礦粉加入試管即可測量



使用MagQuan V磁量分析儀測量不同FeO 含量燒結礦

勝博國際集團 SUNPRO INTERNATIONAL INC

台北 勝綻科技 Tel:02-8791-8971 | 台中 勝瑋科技 Tel:04-2298-0365 | 高雄 勝騏科技 Tel:07-338-5550

使用XacQuan II與MagQuan II發表學術論文列表

1. C. Y. Tsay, S. J. Liang, C. M. Lei, Y. C. Lin, C. L. Lin. Effect of sintering temperature on the microstructural, magnetic and microwave properties of magnesium-manganese ferrites. Ferroelectr. 2012. 435: 1, 62-68

2. T. Chen, S. H. Lin, Y. C. Lin. Effect of low-frequency alternative-current magnetic susceptibility in Ni80Fe20 Thin Films. J. Nanomater. 2012. 2012: 186138, 1-6.

3. T. Chen, Z. G. Chang. Low-frequency alternative-current magnetic susceptibility of amorphous and nanocrystalline Co60Fe20B20 films, J. Magn. Magn. Mater. 2012. 324: 14, 2224-2226,

4. T. Chen, S. M. Xie, H. Y. Jheng. The low-frequency alternative-current magnetic susceptibility and electrical properties of Si(100)/Fe40Pd40B20(XÅ)/ ZnO(500Å) and Si(100)/ZnO(500Å)/ Fe40Pd40B20(YÅ) systems. J. Appl. Phys. 2013. 113: 17B303, 1-3.

5. T. Chen, W. H. Hsieh. Thermal, magnetic, electric, and adhesive properties of amorphous Co60Fe20B20 thin films. J. Alloys Compd. 2013. 552, 283-288.

6. Poonjarernsilp, N. Sano, N. Sawangpanich, T. Charinpanitkul, H. Tamon. Effect of Fe/Fe2O3 loading on the catalytic activity of sulfonated single-walled carbon nanohorns for the esterification of palmitic acid. Green Chem. 2014. 16: 12, 4936-4943.

7. T. Chen, S. H. Lin, T. S. Sheu. Effect of low-frequency AC magnetic susceptibility and magnetic properties of CoFe-B/MgO/CoFeB magnetic tunnel junctions. Nanomater. 2014. 4: 1, 46-54.

8. Sano, D. Himara, H. Tamon. Simultaneous enhancement in porosity and magnetic property of Fe-dispersing single walled carbon nanohorns by oxidation using CO2. Chem. Eng. J. 2015. 271: 43-49.

9. S. Lin, Y. H. Han, T. Y. Chang, C. M. Wang, C. H. T. Chang, J. S. Tsay, Photomagnetic carbon nanotubes at ambient conditions. J. Phys. Chem. C 2015. 119, 20673−20680

10. T. Chen, H. Y. Jheng. Low-frequency magnetic susceptibility and photoelectric properties of Glass/Fe40Pd40B20(X-Å)/ZnO(500Å) and Glass/ZnO(500Å)/ Fe40Pd40B20(YÅ). DOI: 10.6343/ ISU.2015.00086

11. Y. Tsay, S. C. Liang, C. M. Lei, C. C. Chang. A comparative study of the magnetic and microwave properties of Al3+ and In3+ substituted Mg-Mn ferrites. Ceram. Int. 2016. 42, 4748-4753.

12. Sano, K. Yamada, T. Suntornlohanakul, H. Tamon. Low temperature oxidation of Fe-included single-walled carbon nanohorns in water by ozone injection to enhance porous and magnetic properties. Chem. Eng. J. 2016. 283: 978-981.

13. Sano, K. Yamada, S. Tsunauchi, H. Tamon. A novel solid base catalyst for transesterification of triglycerides toward biodiesel production: carbon nanohorn dispersed with calcium ferrite. Chem. Eng. J. 2017. 307: 135-142.

14. L. Ou, W. J. Liu, Y. H. Chang, Y. T. Chen, Y. T. Wang, W. H. Li, J. Y. Tseng, T. H. Wu, P. W. Chi, C. L. Chu. Structure, Magnetic Property, Surface Morphology, and Surface Energy of Co40Fe40V10B10 Films on Si(100) Substrate. Appl. Sci. 2020. 10, 449.

15. J. Liu, Y. H. Chang, S. L. Ou, Y. T. Chen, W. H. Li, T. Y. Jhou, C. L. Chu, T. H. Wu, and S. W. Tseng, 2020, Effect of annealing on the structural, magnetic, surface energy and optical properties of Co32Fe30W38 films deposited by direct-current magnetron sputtering, Coatings, Vol. 10, No. 11, pp. 1028, 1-13.

16. J. Liu, S. L. Ou, Y. H. Chang, Y. T. Chen, Y. C. Chiang, S. C. Hsu, and C. L. Chu, 2021, The characteristics of Co40Fe40W10B10 thin films on Glass and Si(100) substrates, Optik-International Journal for Light and Electron Optics, Vol. 226, No. 1, pp. 165905, 1-9