

## MATS-2010H

### Soft Magnetic Material Dynamic Hyteresisgraph System

#### Model MATS-2010H



Automatic measurement on hysteresis loop and demagnetization curve of permanent-magnet material, accurate measurement on magnetic characteristic parameters such as remanence  $B_r$ , coercive force  $H_cB$ , intrinsic coercive force  $H_cJ$  and maximum magnetic energy product  $(BH)_{max}$ .

Windows measurement software applied simply. The product conforms to China National Standards GB / T3217 - 92 and international standard IEC404 - 5.

Adopt ATS structure, users can customize different configuration as required: According to the size of measured sample to determine electromagnet size and correspondent test source power; Select different measuring coil and probe according to testing method; Determine whether selecting jig according to sample shape; Determine whether selecting heating system according to test requirement.

#### General Features

#### Software Features

#### Software Screen

#### Technical Data

#### Product Family

#### System Specifications

Test AlNiCo standard sample, measuring error on entire magnetic hysteresis cycle estimated: B: 1\_\_ H: 1\_\_

Parameters measured	$B_r$ (%)	$H_cB$ (%)	$H_cJ$ (%)	$(BH)_{max}$ (%)
Uncertainty (k=2)	1	1	1	2
Repeatability (constant temperature)	$\pm 0.3$	$\pm 0.3$	$\pm 0.3$	$\pm 1$

#### Instrument Specifications

##### TPS-2000H Test Power Supply

Output Voltage: 0 ~ $\pm$ 100V

Output Current: $\pm$ 20A (maximum value)

Stability: superior to 0.05%

Stability: superior to 0.05%

##### LZ-210B Fluxmeter

##### DCT150 Electromagnet

Head Diameter: 150mm shrink to 80mm

Head Spacing: 0 ~ 50mm (continual adjustable)

Maximal Magnetic Field: 2.4T (head spacing 10mm, coil current 30A)

##### DCT200 Electromagnet

Range: 2.5, 5, 10, 20 mWb

Full Range Precision: 0.5%

Zero Shift: 2  $\mu$  Wb /30 seconds (2.5mWb)

#### LZ-210H Magnetometer

Range: 0.5, 1, 1.5, 3 T

Full Range Precision: 0.5%

Non-Linearity:  $\pm$ 0.2% (software correction)

#### DCT130 Electromagnet

Head Diameter: 130mm

Head Spacing: 0 ~ 50mm (continual adjustable)

Maximal Magnetic Field: 1.5T (head spacing 10mm, coil current 20A)

Head Diameter: 200mm shrink to 120mm

Head Spacing: 0 ~ 50mm (continual adjustable)

Maximal Magnetic Field: 2.4T (head spacing 10mm, coil current 40A)

#### DCT250 Electromagnet

Head Diameter: 250mm shrink to 150mm

Head Spacing: 0 ~ 50mm (continual adjustable)

Maximal Magnetic Field: 2.7T (head spacing 10mm, coil current 80A)

#### PC6011 A/D D/A card

A/D Conversion: 12Bit, 32 channels

Conversion Time: < 10  $\mu$  s

Conversion Accuracy: 0.05% (full range)

D/A Conversion: 12Bit, 2 channels

Setup Time: < 10  $\mu$  s

©Copy Right 2001 YUXIANG All Rights Reserved

Add :F/16, Jinyuan plaza, # 57 South Hubin.Road, Xiamen, CHINA 361004

Tel : (86)592 2295387 (86)592 2217138 Fax: (86)592 2207122

Email : [yingli@magnets.com.cn](mailto:yingli@magnets.com.cn)