

The first in the world!

Possible FORC&SORC measurement

High Temperature Superconductivity Type VSM

The world's first* of one-twentieth of measurement speed is realized compared to this company's existing product by adopting high temperature superconductivity magnet to VSM.

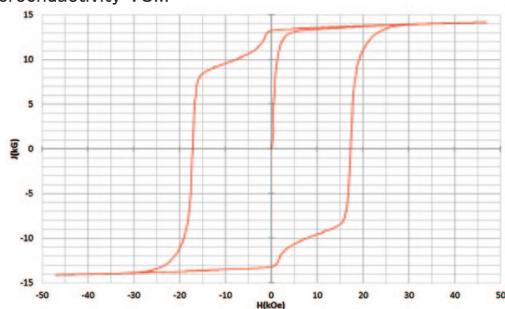
Br, HcJ high accuracy measurement of 0.5 mm cube magnet becomes possible.

* Investigated as of July, 2014 by Toei Industry Co., Ltd.



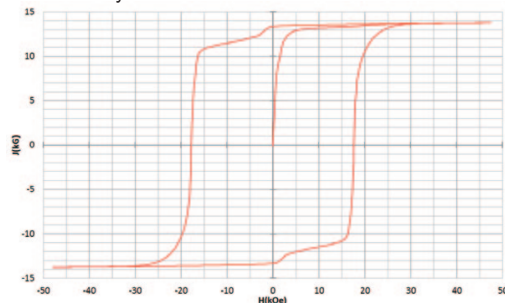
Examples of Result of Measurement

NdFeB (sint.) 0.5 mm cube BH curve by means of high temperature superconductivity VSM



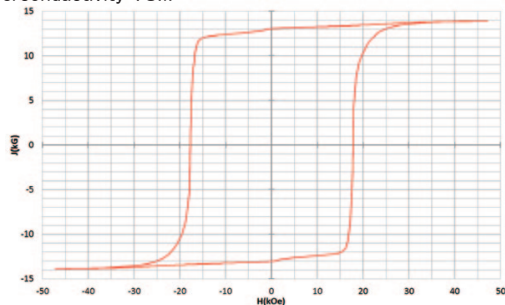
magnetization measurement range: 0.2 emu
Br = 13.2 kG HcJ = 17.2 kOe

NdFeB (sint.) 1 mm cube BH curve by means of high temperature superconductivity VSM



magnetization measurement range: 2 emu
Br = 13.3 kG HcJ = 17.7 kOe

NdFeB (sint.) 4mm cube BH curve by means of high temperature superconductivity VSM



magnetization measurement range: 100 emu
Br = 13.1 kG HcJ = 17.8 kOe

Realization of High Speed Measurement

High speed measurement is realized by adopting high temperature superconductivity magnet. Hmax = 6 Tesla, Full Loop measurement becomes possible in 2 minutes.

(This company's existing machine:

Full Loop measurement needs 40 minutes.)

High Accuracy Measurement of Small Sample of Br, HcJ

High accuracy measurement of Br, HcJ of 0.5 mm cube magnet, intensity distribution etc. of Br, HcJ and comparative measurement of micro-changed amount by cutting out surface reforming area become possible.

Also, comparative measurement of finishing degradation becomes possible.

FORC&SORC Measurement

Evaluation of interaction between particles and coercive force distribution (particle diameter) becomes possible.

Sample Temperature Variable Measurement

-50°C ~ +200°C temperature variable UNIT (Option)

Miniaturization of Magnetic Field Generation part

Size of magnet system part: 0.8 x 0.3 x 0.3 m