

MJC 210 - Single Sheet Tester



MJC 210 – Small table top Single Sheet Tester for the AC hysteresis measurements

• Operating Principle

A soft magnetic single sheet sample, such as electrical steel, is placed in the tester. The tester consists of a coil system to magnetize the sample with an alternating field strength H and a pick-up coil to sense the sample's polarization. Two laminated C-yokes close the magnetic circuit. The yoke is a high quality lamination with low losses and thus has no significant effect on the measurement.

The tester MJC 210 is used with the powerful Remacomp models which use test the BH-loop and evaluate magnetic quantities, such as core losses, peak polarization, amplitude permeability, remanence, coercive field strength etc..

A smart opening mechanism allows fast sample mounting and a spring mechanism reduces the mechanical stress on the sample.

The operation principle is related to the large 500mm x 500mm tester of IEC 60404-3, but applied to smaller size of 210mm x 210mm. The conformity to IEC 60404-3 is demonstrated by a comparative test below. The small size makes it more handy, less expensive and increases the measuring range in frequency and amplitude compared to the 500mm x 500mm one. Also less sample material is needed, which makes it perfect for research and quality control applications.

• Features

Correlated to IEC 60404-3

Compatible with Remacomp C - 1200, C - 1207, C - 2200 and C – 2207

Frequency Range: DC to 1000 Hz (depending on sample and excitation)

DC H_max: 22 kA/m (10A fused)

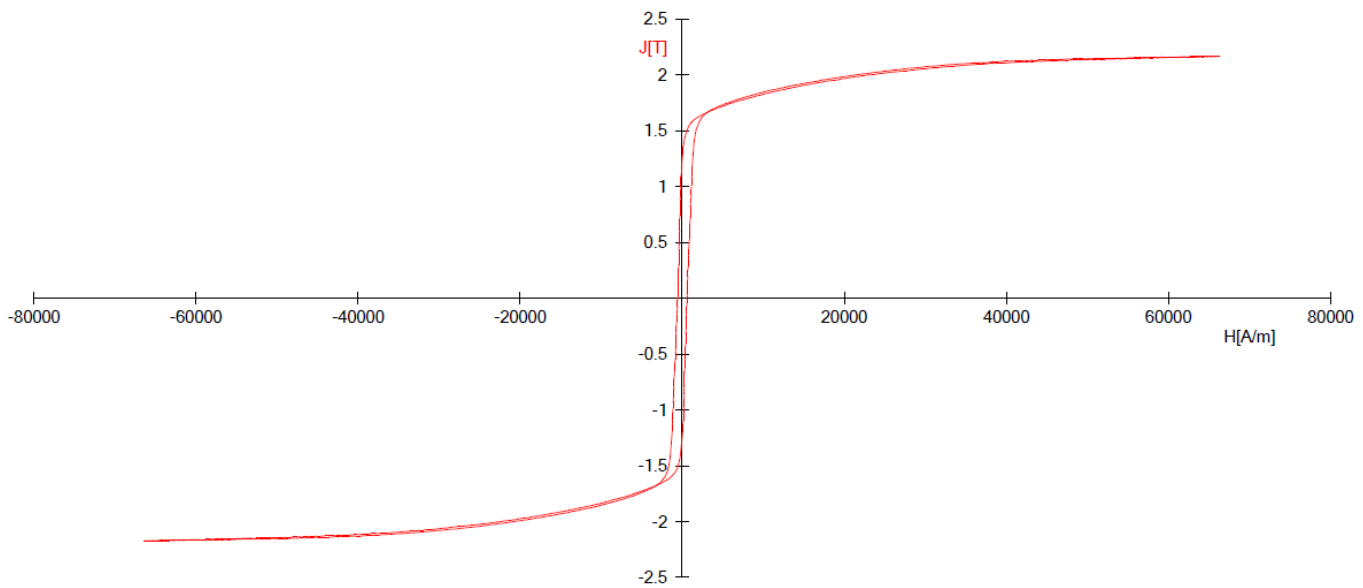
AC H_max: 30 kA/m continuous, 66kA/m single shots

Sample length: min. 210mm

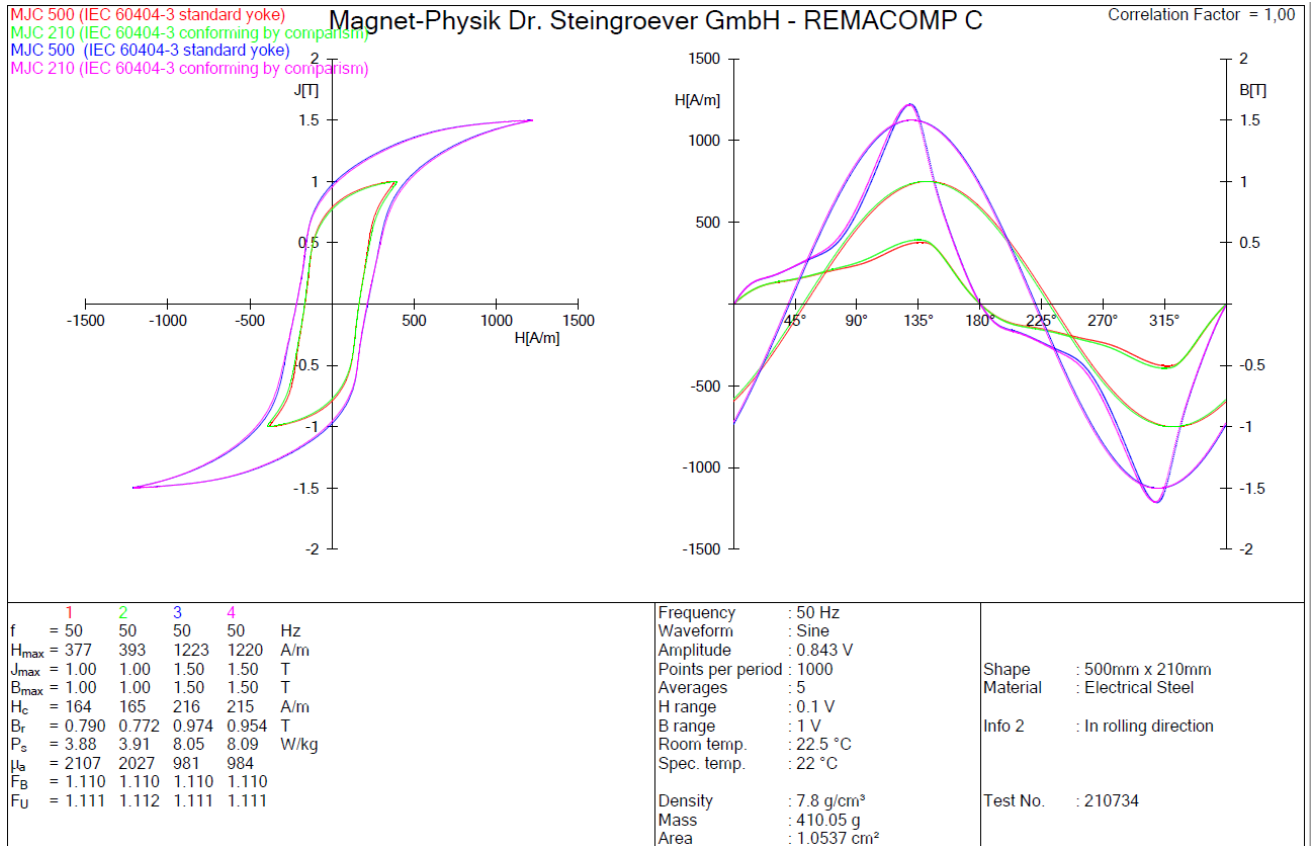
Sample width: min. 100mm, max. 210mm

Sample thickness: max. 1.5mm

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High excitation example of an electrical steel strip testes at 50Hz in single shot mode with Remacomp C-1200. The current driven was 30A.



Comparison between MJC 210 and MJC 500. The same sample was tested in both yokes. The results achieved in both yokes are identical within the margin of error. This demonstrates conformity of MJC 210 to IEC 60404-3.

Due to continuous product improvements, specifications are subject to change without notice.

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