

MagCam's Second Generation Products Provide The Most Advanced And Most Versatile Inspection of Permanent Magnets

Leuven, Belgium, April 15, 2013 - MagCam, a world leader in advanced inspection systems for permanent magnets, has expanded its magnetic field camera product range with its newest high performance platform, named MagScan. This new generation camera platform is a further improvement of the first generation product that is being used in the development, production and quality control areas of highly accurate permanent magnets. MagScan performs the most advanced measurements of large magnets and magnetic assemblies of up to 200mm x 200mm in size. Its versatility makes it also possible to perform the measurements of radial field distributions on permanent magnet rotors and radially magnetized sensor magnets, due to the integration of one or more MiniCube magnetic field camera's on a mechanical scan system.

With the MagScan, it is now possible to measure and analyze magnetic field distributions of areas as small as 1mm x 1mm and as large as 200mm x 200mm with a world class spatial resolution of 0.1mm at record speeds up to 6 cm²/s, corresponding with images of 4 megapixel. In the case of rotor magnets, a complete circumferential image of the radial magnetic field can be measured in a matter of seconds. These high speeds lead to unprecedented thru-puts in an incoming quality or production inspection environment. Historically, low thru-put speeds resulted in unacceptable high inspection costs.

The MagScan system is based on MagCam's unique and proven magnetic field camera technology, featuring a patented chip with an integrated high-density two-dimensional array of more than 16000 microscopic Hall sensors. This sensor chip allows very fast, accurate and high-resolution magnetic measurements of 2D magnetic field distributions. These magnetic field images contain a large amount of quantitative information about the magnet's properties and quality.

Quantitative magnet parameters are extracted from the measurement data using MagCam's versatile MagScope measurement & analysis software. This software offers a variety of data analysis options, which can be chosen based on the exact magnet type. MagScope can analyze numerous magnet types with different:

- geometries (block, cylinder, ring, complex shapes etc.)
- magnetization profiles (multipole, uniaxial)
- magnetization directions (axial, diametrical, radial, etc.)

MagScope extracts a lot of quantitative magnet properties based on one single measurement such as:

- magnetization vector and deviation angle
- multi-pole segment sizes/angles
- field homogeneity and local defects
- north-south asymmetry

The MagScan system can be used in R&D to develop better end products in a shorter time by having instant and complete magnet characterizations. In production, 100%

inline testing and quality control is now possible, leading to higher production yields and tighter tolerances. High quality permanent magnets are used in sensor systems, electric motors, medical devices, industrial equipment, consumer electronics, automotive applications and more. In short wherever magnets need to conform to high quality standards.

About MagCam

MagCam is a technology leader, specialized in advanced inspection systems for permanent magnets, based on its unique 'magnetic field camera' technology. MagCam's world-class magnetic field cameras are used for quality control, as well as development of high-end permanent magnets and magnet systems. MagCam's customers include sensor manufacturers, motor/generator constructors, medical and biotech companies, consumer electronics producers, research labs, magnet producers and suppliers.

Customer contact:

MagCam NV

Research Park Haasrode

Romeinse straat 18

B-3001 Leuven / Belgium

www.magcam.com

info@magcam.com

Tel. +32 494 58 94 04

Fax +32 16 70 01 87

Editorial contact:

Dr. Koen Vervaeke

koen.vervaeke@magcam.com