

M-axis

Characterization of permanent magnet properties

M-axis is a high precision measuring device for the characterization of the magnetic characteristics of permanent magnets. Based on its modular design the M-axis device is able to measure near and far field magnetic properties.



Name: I No. 2				
No. 2		Magnet type:	manually	
		Volume (mm²):	883.6	
Current Value		Last Value		Nominal Values
No.:	2	1	'Angle: Orien	tation: Magnetic moment [Am?]: 0.736
Direction:	N	N	4.00	Permanence (mT): 1046
Magnetic moment (Ar	nt: 0.6899	0.7500		Remanence (mT): 1096
Permanence [mT]:	981.2	1066.7	270*	0* Axis deviation [']: 2.000
Remanence (mT):	1030.3	1120.0		Longtude [']: 0.000
wis deviation ["]:	3.01	2.00		
.ongitude ["]:	349.97	350.08	180*	
			Quality: 100 %	10
			Uncertainty of deviation [*]: 0.0	00
			L	
	Measure! Back		Offset Stop meas	urement

Working principle

- Determination of open remanence Br (also permanence)
- Magnetization angle measurement
- Graphical presentation of the size and orientation of the error angle
- Adapter for different magnet geometries
- Statistical analysis of parameters possible
- Automated storage of the determined parameters
- Integration of the system in existing manfacturing process and process automatisation possible

Measurement principle

The method used in M-axis is based on the determination of the dipole properties of permanent addition magnet materials. In to the three-dimensional position of the magnet, the moment and the direction of magnetic magnetization are obtained.

Compared to Helmholtz coils (where magnetic flux changes are integrated) M-axis measures the induced magnetic field directly. As a result a single measurement can be performed much faster!

Technical features

- Magnetic moment: 0.01 Am² to 4 Am²
- Remanence: ±1%
- Magnetization angle accuracy: ±0.1°
- North/South-Effect (optional)
- Interface: USB
- Comprehensive measurement software
- Fast classification (up to 500 pcs/h)
- Power supply: 85 -264 VAC / 47 -63 Hz

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