



List-Magnetik Dipl.-Ing. Heinrich List GmbH

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 Geschäftsführer / Management Board: Dipl.-Ing. (FH) Heinz-Dieter List, Dipl.-Inform. (FH) Rainer Prigge



Manufacturer's Inspection certificate 3.1 according EN 10204

Certificate ID : XXX
Certificate Object : Magnetic Permeability Meter FerroPro compact

Manufacturer : List-Magnetik Dipl.-Ing. Heinrich List GmbH
Serial No. : XXX
Probe Serial No. : FPC-5 / xxx
Serial No. Calibration Standard : XXX
Customer : XXX
Inventory No. : ---

Testing Commissioner : XXX
Considered regulations : DIN EN 9934, ASTM A342 and IEC 60404-15,
 IATF16949:2016, Kap. 7.1.5.3.1 „Internal Laboratory“ is achieved
Date of calibration : XXX

Calibration procedure

After the zero point adjustment, the characteristic curve of the permeability measuring device was set in such a way that the device correctly displays the permeability values of the calibrated reference standards 3019, 3110 and 3111 within the specified measuring accuracy. The reference standards are calibrated by **PTB Braunschweig (National Metrology Institute of Germany)** at 30 kA/m.

The test tip was oriented axial to a flat side of the reference standards. Then the permeability value of the calibration sample belonging to the device was determined with the calibrated device and the sample was marked with the determined value.

Permeability Standard S/N : 3109
 Calibration mark PTB : 29125PTB20 dated 07.07.2020
 Permeability Standard S/N : 3110
 Calibration mark PTB : 29126PTB20 dated 07.07.2020
 Permeability Standard S/N : 3111
 Calibration mark PTB : 29127PTB20 dated 08.07.2020

Test Certificate

The instrument has been calibrated to give values of the permeability μ_r with an overall accuracy of 5% in $\mu_r - 1$ for samples with dimensions and magnetic properties similar to the reference blocks used for the calibration. Permeability measurements carried out with the calibrated Ferromaster permeability meter are compliant with ASTM A342 and IEC 60404-15 standards.

Standard Inventory No.	Reference value (μ_r)	Indicated Value pre-calibration		Indicated Value post-calibration	
		μ_r	% (base μ_r-1)	μ_r	% (base μ_r-1)
3109	1.1164			1.119 μ_r	2.23 %
3110	1.4501			1.450 μ_r	- 0.02 %
3111	2.7290			2.753 μ_r	1.39 %

Customer Calibration Standard: $\mu_r = 1.37$

Test Result Values within tolerance acceptable (μ_r-1) \pm 5 % yes no

24.10.2024

Date

Stamp

Signature Management

