

ICS 25.220.40;25.220.50
CCS A29



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 4957-2025

Replacing GB/T 4957-2003

**Non-conductive coatings on non-magnetic electrically
conductive base metals - Measurement of coating thickness -
Amplitude-sensitive eddy-current method**

非磁性导电基体金属上非导电覆盖层 覆盖层厚度测量 振幅敏感涡流法
(English Translation)

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Foreword

GB/T 4957-2025 is a recommended national standard (GB/T) of the People's Republic of China, issued on 31 October 2025 by the State Administration for Market Regulation and the Standardization Administration of China, with effect from 1 May 2026.

This edition replaces GB/T 4957-2003.

The document adopts an international standard (ISO or IEC).

It is under the responsibility of the China Machinery Industry Federation.

Classification: ICS 25.220.40;25.220.50; CCS A29.

1 Scope

Coating thickness often has to be measured without damaging the part. This standard describes the amplitude-sensitive eddy-current method for measuring the thickness of non-conductive coatings on non-magnetic electrically conductive base metals, for example paint or anodic type layers on metals such as aluminium. It is a recommended national standard.

Surface finishing shops, coating applicators, aerospace and automotive suppliers, metrology and calibration laboratories, and quality inspectors who use eddy-current thickness gauges can use it. Instrument makers may also refer to it when documenting measurement procedures and calibration.

The standard was issued on 31 October 2025 and takes effect on 1 May 2026. It replaces GB/T 4957-2003, an edition that is more than twenty years old, so existing inspection procedures and gauge instructions that cite the earlier edition deserve a fresh review against the current text.