



[www.insize.com](http://www.insize.com)

## MPI-M510

### PORTABLE AC MAGNETIC POWDER FLAW DETECTOR OPERATION MANUAL

PLEASE SCAN QR CODE TO  
WATCH THE OPERATION  
VIDEO OF PRODUCTS.



一. Product Overview

MPI-M510 Portable AC Magnetic Particle Flaw Detector (Professional) is a lightweight miniature magnetic particle flaw detector that uses magnetism to magnetize workpieces made of ferromagnetic materials, and it can magnetize various parts and is suitable for products in the oilfield, shipbuilding, internal combustion engine parts, coal mine, machinery, standard parts, oil pumps and nozzles, aircraft manufacturing, automotive parts, bridge building, chemical industry, boiler pressure vessels, railroads, etc., which have surface and near-surface defects caused by forging. It can detect surface and near-surface defects caused by forging, quenching, welding, fatigue, etc., such as chain rods, crankshafts, bearings, high-strength bolts, springs, forgings, petrochemical pipe fittings, valves, blades, gears, rollers, anchor chains and welds, etc., which have complex geometrical shapes.

Standard JB/T 7411-2012 ASTM E709-08 ASTM E1444 EN10228-1:1999 10 9934

二. Second, product features

1. Lightweight ergonomic design reduces the operator's muscle fatigue.
2. Magnetic pole head with movable joints can make good contact with any shape parts.

三. Specification

Model	MPI-M510-P	MPI-M510-JV	MPI-M510-E
Weight	1.0kg/5lb		
Dimensions	120x80x40mm (probe clearly displayed on A1 standard accessory lead pipe)		
IPMT type	AC/DC magnetic particle detection		
Display Form	4.3" (110mm)		
Magnetic pole head	30 (1.1811")		
Power supply	AC220V, 50Hz		
Power button	Emergency stop	Start type	Breaker type
Dimensional compliance	10-40°C		
Compliance (EMC)	CE/UL/CSA/IEC		
Warranty	2 years		

四. Operation and Maintenance

1. Keep the magnetic yoke clean and tidy.
2. Avoid pressing the magnetization button for a long time, the magnetization time is not more than 3 seconds each time, and avoid the magnetic vantage splashing water for a long time.
3. When the use is finished, the contact part will be oiled to prevent rusting.
4. A small amount of lubricant should be added to the pin part of the movable joint before use.
5. The magnetic pole head of the probe should be kept in good contact with the workpiece before pressing the switch. The switch should be released in time before the probe leaves the workpiece. To avoid improper operation caused by overheating damage to the instrument.