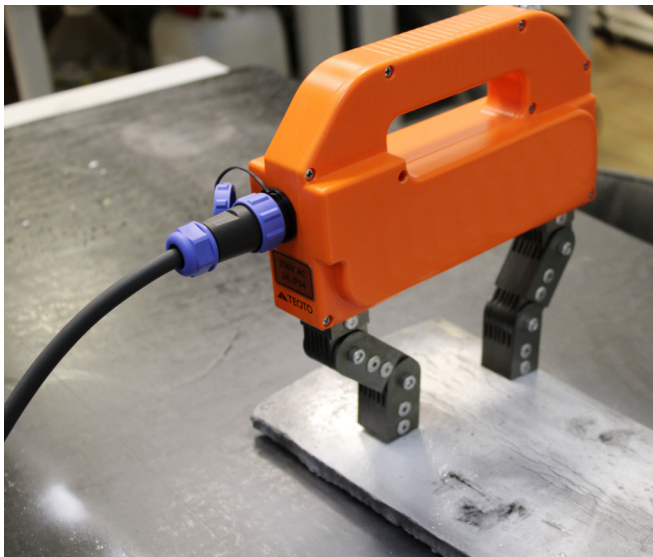


## Magnetic particle inspection (MPI) testing yoke TQ EMA-100



The AC electromagnetic yoke is suitable for magnetic particle inspection to detect surface and subsurface defects such as cracks, hair lines and tears of base material as well as incomplete fusion of welded joints.

Suitable for test objects made of ferromagnetic materials with a relative magnetic permeability of at least 40.

The yoke can be used for quality control of products in aviation, automotive, railway, oil and gas, power generation and other industries.

### Exploitation advantages

- The dust and moisture-proof case are designed for reliable and safe work in demands of field inspection
- The connector of power cable ensures tightness, facilitates the operation and transportation of the equipment
- The adjustable articulated arm of the yoke provides efficient operation on the parts of any configuration and orientation
- The magnetization of entire product or its individual section is possible to test various objects and welds

### Objects of control:

- Welds
- Parts of machines and mechanisms
- Cast parts
- Building metal structures
- Pipelines
- Rolled metal
- Castings

### Exploitation

Magnetic particle inspection is a very common non-destructive testing method. A special magnetic powder is required to be applied to the surface under study.

When the control zone is magnetized the highest concentration of magnetic field lines is observed directly above the defect. Magnetized powder particles accumulate in this place and acquire a certain structure. The density of powder particles decreases when moving away from the defect (cracks, discontinuities etc.).

This is followed by a visual interpretation of the indicator lines: the localization, orientation and extent of surface and subsurface defects. The resulting pattern can also be compared with reference samples for magnetic particle inspection.

### Magnetic particle inspection (MPI) testing yoke EMA-100 operation advantages:

- Suitable for non-destructive testing of test objects made of ferromagnetic materials in the field conditions as well as in shop and laboratory.
- Suitable for operating in stationary magnetic particle test benches.
- Big ergonomic trigger for gloved operation.
- Pole span is easily adjustable: min pole span – 24 mm; max pole span – 263 mm.

## Magnetic-eddy-current flaw detector TQ VID-345

### Technical specification

Characteristic	Values
Average pole span	142 mm
Max pole span	263 mm
Min pole span	24 mm
Pole cross section F	26 x 25 mm
Waveform	AC
Operating current	2,5 A
Lifting force	10 kg
Power parameter	230 V, 50 Hz
Duty cycle	50 %
Detachable power cable	3 m
Dimensions	231 x 260 x 61 mm
Weight	3,9 kg
Operating temperature range	-20 ... +40 °C

### Basic delivery set:

- Portable yoke
- Power cable
- Equipment certificate
- User manual
- Carrying bag

