

HORIZONTAL MAGNETIC PARTICLE FLAW DETECTORS

UNIMAG AC-DC AEROTESTER SERIES



Horizontal flaw detector *UNIMAG AC-DC* is a machinery for nondestructive testing of ferromagnetic steels and cast irons by magnetic particle method. *Aerotester* series due to their parameters satisfy the requirements for testing in aircraft industry according to ASTM E 1444, ASTM E 709, ASTM A 275, GOST 21105-87, EN ISO 9934-1+3, NADCAP acc. to AS 7114/2, Boeing, Pratt and Whitney, SAFRANE, GE Aircraft Engines, Honeywell, Rolls Royce, Airbus Industrie, Sikorsky Aircraft and other standards.

Magnetization control system allows carrying out the test itself according to adjusted parameters. In case of non-permissible deviation of test parameters (voltage drop, oxides on contacts or components) the system stops the testing process and warns the inspector by the optical or acoustic signal, respectively.

Specification of basic version:

- Clamping length of 1200 mm, max. 250 kg weight of unsupported part, 600 kg weight of supported part
- Continuous current adjustment by potentiometer, display of set value (green display)
- Current measurement directly on the generator output (red display)
- 6000 A three phase FWDC, AC 3500 A
- Magnetization from 1,0 sec. (head-shot), adjustable length and number of pulses
- Quick Break feature
- Duple-sided parking position of coil enabling parts insert from above, e.g. by a crane
- 1170 N thrust of a pneumatic system at 4 bar pressure
- Air pressure reduction valve; standard connection of 6 bar compressed air
- Control valve of suspension flow for manual or automated spraying, in a basic version: Manual hose pouring, time control of magnetization and suspension
- Pumping circular system, 40 l tank, 90 VA pump, cavitation-free stirring
- Two-button system of clamping – operator must trigger the clamping thrust by both arms

Facilities on demand:

- Clamping length up to 5600 mm, \varnothing 508 and 635 mm coil, up to 10000 A FWDC, magnetization from 0,5 sec., HW magnetization, footswitch, rollers for part rotation, automatic DC demagnetization of 30 steps, gauges + meters, UV lamps, powders, concentrates ...