

FAST 100% SORTING OF METAL PARTS

The Varimac V, latest in MAC's line of eddy current comparators gives you fast, convenient sorting of metal parts such as fasteners, bearings, and other cold formed pieces. Its high speed continuous operation and reliability in production environments make 100% inspection economically feasible.

SIMPLE TO USE

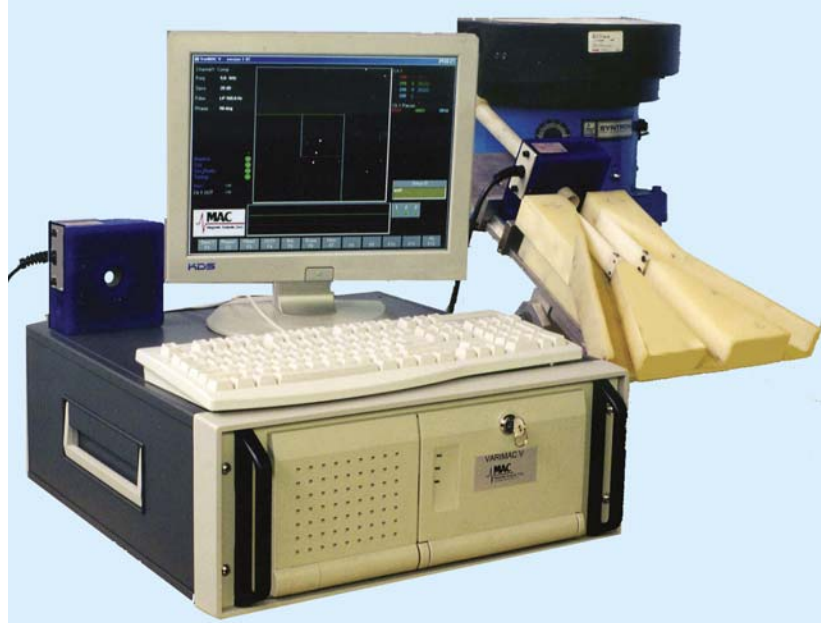
The Varimac V electronics, a test coil, a balance coil, a known sample of your part, and an optional monitor are all that is needed to set up your test. After setup, Varimac runs automatically. Check its operations with a quick look at the remote monitor on your desk, or other location. No need to run out to the plant floor.

SORT FOR DIFFERENT ALLOYS & HARDNESS

The instrument features high sensitivity with high resolution and selective circuits to optimize your ability to differentiate between signals from wanted and unwanted conditions, whether you are looking for different alloys, hardness, or major dimensional variances. A new broader frequency range of 100 Hz to 2 MHz enhances selectivity and a hard disk drive with 10 GB gives you all the data storage for setups and reporting you might need.

SELECT THE THRESHOLDS THAT WORK BEST FOR YOU

As in earlier Varimac models, the thresholds can be set as three horizontal bands to select signals that peak below, within, or above a



Varimac V
(with standard keyboard and optional monitor)

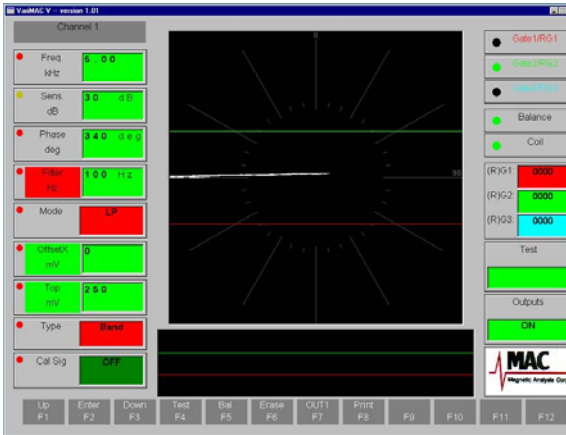
designated level; or as a user adjustable target rectangle to select signals that peak inside or out of a designated area. The thresholds can be set to select signals based on amplitude, phase, or a combination of both.

3 WAY SORTING WITH MAC'S HIGH SPEED PARTS GATE

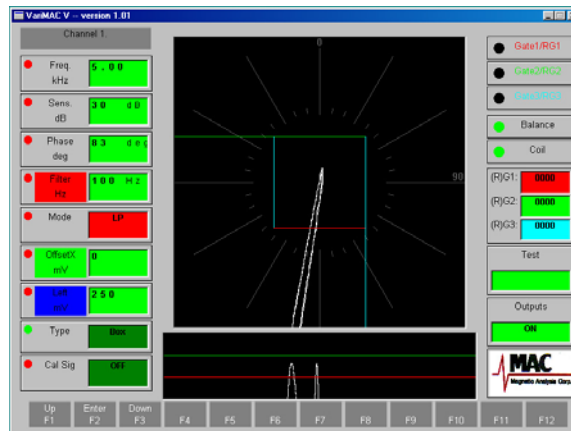
Three outputs, each corresponding to one region, are available. Used with MAC's 570 Parts Gate system, parts can be sorted at speeds up to 6 parts per second into acceptable, below specification and above specification. Or, use the outputs for markers and other operations. You can see a counter display on screen which shows the number of parts in each region.

A standard keyboard, or optional remote keypad controls the system, and a back panel output connector is provided for an external monitor. Setup and test data can be shown on the monitor in full color. A lockout is provided to help you prevent unauthorized changes to equipment settings.

The Varimac V is fully compatible with all current and past Varimac coils.



Test signal shown above using the band type threshold to separate product based on the phase angle of the signal.



Test signal shown above using the box type threshold to separate product based on the amplitude and phase of the signal.



Model 570 Parts Gate, used with a vibratory bowl or other mechanics, feeds the parts through the test coil and into the correct one of three chutes for separating into above spec, below spec, and within specifications.

SPECIFICATIONS

PLATFORM	Celeron® 700 MHz or better, single board computer, with 10 GB hard drive or better & Windows® 98 OS
CHANNELS	Single channel comparator operation
TEST FREQUENCY	100 Hz - 2000 kHz
FLAW BANDWIDTH	1 KHz
FILTER	Low Pass positions will be chosen from discrete steps that correspond to Hertz (flaw Freq.). The filter can be turned OUT
PHASE	0 - 359° calibrated in 1° steps
SENSITIVITY	0 - 99 dB, calibrated in 1-dB steps
THRESHOLDS	Band or Box type, selectable through setup. Each boundary line can be independently adjusted.
CALIBRATION	Internally generated signal provides a system check for repeatability of all parameters.
BALANCE	Auto balance for entire frequency range by pressing "BAL" key
EXTERNAL DISPLAY	A back panel output connector is provided for an optional external monitor. Full trace is displayed on the SETUP screen while only peak is displayed on the TEST screen.
SETUP	Software controls for all functions, set through the standard keyboard or optional remote keypad
SYSTEM STATUS INDICATOR	Balance indicator, coil system (open or short coil condition), threshold indicator for active thresholds, and system ready indicator, are all displayed on monitor. Any failure causes an alarm, and system ready indicator changes to red.
COUNTERS	Count for the number of signals which peak in each of the 3 different threshold regions is displayed in the TEST screen.
OUTPUTS	3 outputs, each corresponding to one region assigned through menu. Each region can be reassigned to a different output. All outputs can be delayed and their duration can be varied independently in increments of 5 ms. Three way sort output, compatible with MAC 570 parts gate, along with solid state relay, is also provided TTL - Each output has opto-isolated, jumper selectable TTL output included. Can be used for external counts Recorder - X and Y BNC output. Signal is real time response, not stretched for slow recorders.
REPORT	Simple report shows number of pieces in each region. Detailed report includes X and Y position for each piece. Report saved on hard drive, in Excel format.
STORE & RECALL SETUPS	An unlimited number of setups can be stored and recalled
MODE	A Lockout Mode prevents unauthorized changes in equipment settings. Must be unlocked to change setup.
COILS & COIL DRIVE	All current and past Varimac coils are compatible. Primary or bridge drive, internally switchable. Level adjustable in the CONFIG menu.
CABINET DIMENSIONS & WEIGHT	19 1/2" W x 7" H x 20.56" D (49.53 cm x 17.8 cm x 52.2 cm) 65 lbs. (32 kg.)
POWER REQUIREMENT	120 VAC, 50/60 Hz, single phase, 5 amp 240 VAC 50 Hz available when specified at time of order.

Celeron® is a registered trademark of Intel Corp. Windows 98 is a registered trademark of Microsoft Inc.
MAC is a registered trademark of Magnetic Analysis Corp.



Magnetic Analysis Corp.

103 Fairview Park Dr, Elmsford, NY, 10523-1544.
www.mac-ndt.com

email: info@mac-ndt.com

Tel: 800-4NDT-MAC
Tel: 914-530-2000

Fax: 914-703-3790
VARIMAC 8.10

MAC is a registered trademark of Magnetic Analysis Corp.