



Model TYM-4004

Automatic Testing  
Line Hose & Hoods

Up to 50,000V AC,  
100,000V DC or  
both

Allows Testing to  
ASTM D1049,  
D1050 and F478  
Standards

The TYM Series is The  
VON Corporation's

fully automated line hose and hood test solution. Units allow testing of all standard line hose and hoods, even class IV. Tests are timed and an audible alarm sounds failures or test complete, with bright flashing colored lights signaling which position failed or test complete. Four and Six position models are available.

**CAPACITY:** The TYM machine will automatically and simultaneously test four or six line hose or hoods at voltages to 50,000 volts A.C. or 100kV DC, depending on purchased options (40kV AC and/or 80kV DC Standard). The YP series is a four or six drawer machine that will provide the same tests when slaved to a master rubber goods testing machine, dependent on that master's high voltage capabilities. These machines are capable of testing all standard line hose and hoods. With the proper electrodes all standard line hose and hoods may be tested in accordance with the latest ASTM D1049, D1050 and F478 standards.

**VOLTAGE:** The input voltage is 120/240 volt A.C. single phase. The TYM series has 0-50,000 volts A.C. test voltage provided by a continuous duty transformer. The TYM-DC series has 0-80,000 volt D.C. supply. The TYM-ACDC series contains both supplies and a transfer switch for changing between the high voltage supplies. The test voltage is measured by means of a resistive divider connected directly across the high voltage circuit. An LCD displays the output voltage both digitally and with a bar graph. The test voltage is raised and lowered with a special solid state device at a rate of approximately 1 kilovolt A.C. or 3 kilovolt D.C. a second.

**CURRENT:** The current of each being tested is continuously monitored by the microprocessor control system. The active current leakage as well as the peak current is displayed on an LCD display both digitally and with a bar graph.

**VENTILATION:** One exhaust fan is provided in the top rear of the testing cabinet to remove ozone.

**ENCLOSURE:** Eyebolts are provided in the top for lifting by a crane.

**CONTROLS:** A menu based system provides all controls from the front control panel. All standard tests come predefined for the user. These predefined tests set all the machines settings and automatically run the test on the specified class of line hose or hood. There are also 4 user defined test modes available, as well as a mode for manual control of the entire system.

**INDICATORS:** All LED light indicators operate in a fail safe mode by being lighted at all times. The lights flash when indicating. A red "HIGH VOLTAGE FAILURE" light is provided on each drawer. A red " FAIL" light and a green "TEST COMPLETE" light are provided on the control panel. The LCD current display shows the current leakage current, as well as saving the peak current. After a failure the LCD display also indicates which line hose or hood failed.

**OPERATION:** The line hose and hoods are first fitted into their special fitted electrodes. The inside electrode for the hose is a properly sized rod. The outside electrode is a piece of shaped aluminum hinged along one side. The hose or hoods with their electrodes are then placed into the machine and connected to their high voltage and ground terminals. The center electrode is a high voltage and the outer electrode is at ground. The operator selects the voltage class to be tested from the menu, and pushes the "START" button. From one to six line hose or hoods as selected by the operator will be simultaneously tested.

The automatic high voltage cycle includes raising and lowering the voltage to the setpoint, automatic timing of the test, and automatic visual and audible indication of line hose/hood pass or fail. A line hose or hood which fails will stop the test, cause a steady audible signal, indicate which position has failed, and discharge any remaining voltage..

---

The VON Corporation

P.O. Box 110096 – 1038 Lomb Ave. SW – Birmingham, AL 35211

Phone: (205) 788-2437 – Fax: (205) 780-4015

E-Mail: [voncorp@voncorp.com](mailto:voncorp@voncorp.com) – Web Site: [www.voncorp.com](http://www.voncorp.com)