

# MODEL STA-30A

## Mains Frequency A.C. Spark Tester

- >> Electronic Dual Detection
- >> Solid-State Circuits
- >> Output Current Limited
- >> Plug-in Subassemblies
- >> Performs UL & CSA Approved Spark Test

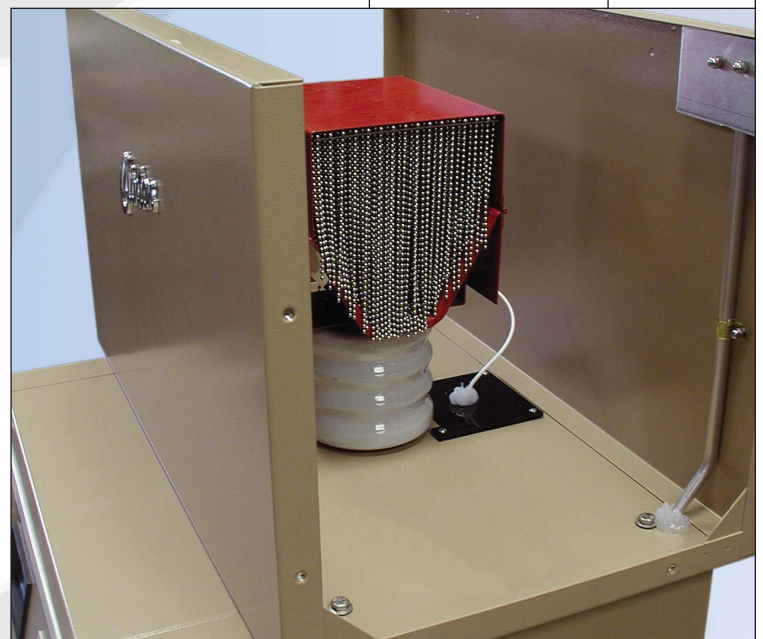
Large diameter slow moving cables, wide tape cables and sheet films are sometimes most conveniently tested for dielectric failure and material flaws using power mains frequency.

The Model STA-30A Mains Frequency AC Spark Tester features a unique electronic dual fault detecting arrangement and test voltages adjustable from 500v to 30 KV rms. A sensitive circuit with a one microsecond response detects brief arcs occurring on both positive and negative voltage crests. In addition, a unity power factor discriminator is employed to respond to the resistive current associated with an arc. Since it is insensitive to capacitive electrode current, reliable fault detection is assured.

Panel controls are provided for power on/off, test voltage adjustment, 3 digit total fault count, counter reset, and high voltage reset.

Standard models provide a choice of bead chain electrodes for cable diameter capacities to 4 1/2 inches. The bead chain electrode is contained in a sheet metal housing with a hinged interlocked cover and panels are affixed to both ends of the enclosure for added safety. Roller guides are positioned at each end of the electrode containment chassis.

All electrodes feature a high density, staggered bead drape to provide more intimate contact with the cable under test. The Model STA-30A performs a spark test that meets both UL and CSA requirements.



# STA-30A SPECIFICATIONS

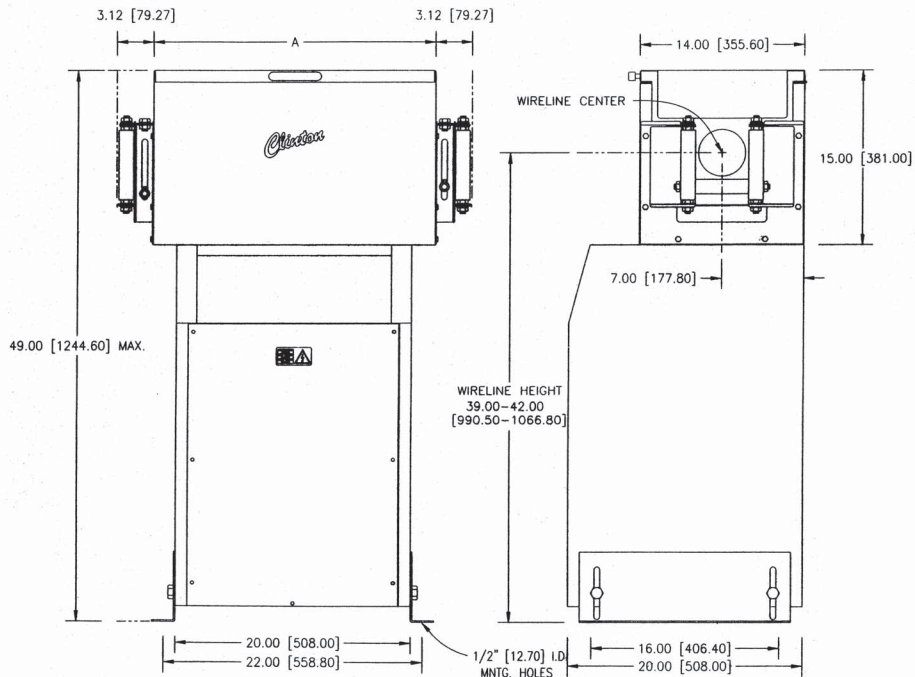
Test Voltage ..... Approx. 500 volts to 30kV rms, depending on electrode type and product under test.  
 Voltage Metering ..... 0-30KV illuminated with mirror scale.  
 Accuracy +/- 2% FSD.  
 Test Frequency..... 50 or 60 Hz.  
 Output Current..... 6mA maximum.  
 Line Speed..... UL 60Hz = 33.3 x electrode length in inches or 9 cycles.  
 UL 50Hz = 27.8 x electrode length in inches.  
 BS EN50356 = 1.2m/min per mm of electrode length.

Wire Line Height..... Adjustable 39" - 42".  
 Fault Resolution ..... 40 milliseconds.  
 Response Time ..... Approximately 1 microsecond.  
 Process Control Output ..... Form C relay contacts rated 5 amperes at 120VAC.  
 Power Requirements ..... 120VAC 1.6 amperes 50/60Hz, 240VAC .8 amperes 50/60Hz, optional.  
 Typical Weight..... 235 lbs. (106.5 kgs).

Standard Electrode Specifications:

MODEL	ELECTRODE	GUARD LENGTH (A)	MAX. SPEED					
			UL 60Hz		UL 50Hz		BS EN50356	
Product Size - 3/4" through 2" diameter								
BD-E206	6"	24"	200 fpm.	61 mpm.	167 fpm.	51 mpm.	600 fpm.	184 mpm.
BD-E212	12"	24"	400 fpm.	122 mpm.	333 fpm.	102 mpm.	1200 fpm.	368 mpm.
BD-E218	18"	36"	600 fpm.	183 mpm.	500 fpm.	153 mpm.	1800 fpm.	552 mpm.
BD-E224	24"	36"	800 fpm.	245 mpm.	667 fpm.	204 mpm.	2400 fpm.	736 mpm.
BD-E236	36"	48"	1200 fpm.	368 mpm.	1000 fpm.	306 mpm.	3600 fpm.	1104 mpm.
Product Size - 2" through 4 1/2" diameter								
BD-E406	6"	24"	200 fpm.	61 mpm.	167 fpm.	51 mpm.	600 fpm.	184 mpm.
BD-E412	12"	24"	400 fpm.	122 mpm.	333 fpm.	102 mpm.	1200 fpm.	368 mpm.
BD-E418	18"	36"	600 fpm.	183 mpm.	500 fpm.	153 mpm.	1800 fpm.	552 mpm.

Examples are only for specific application help, please contact factory.



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Specifications subject to change without notice. 12/06 EN