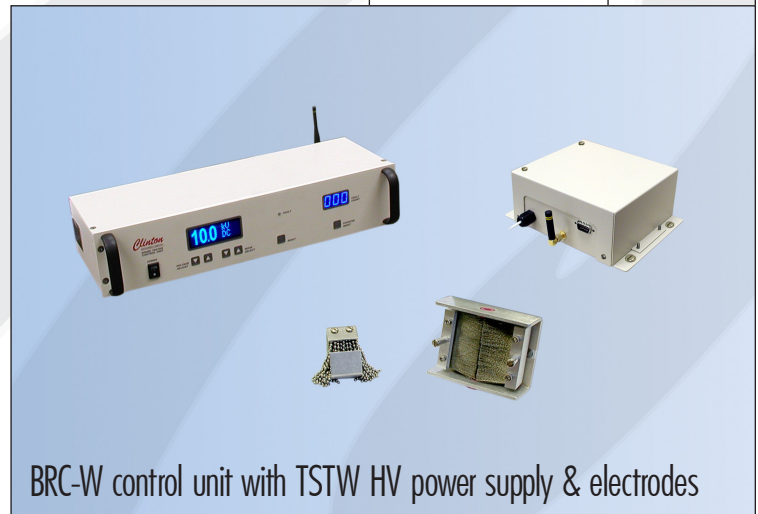


MODEL TST-10W

Wireless Digital D.C. Spark Tester

- >> Reliable spark testing during twinning
- >> No control loop slip rings required
- >> Uses 24V DC from inside twinner
- >> Bare wire identification
- >> Digital voltage and fault count displays
- >> CE approved

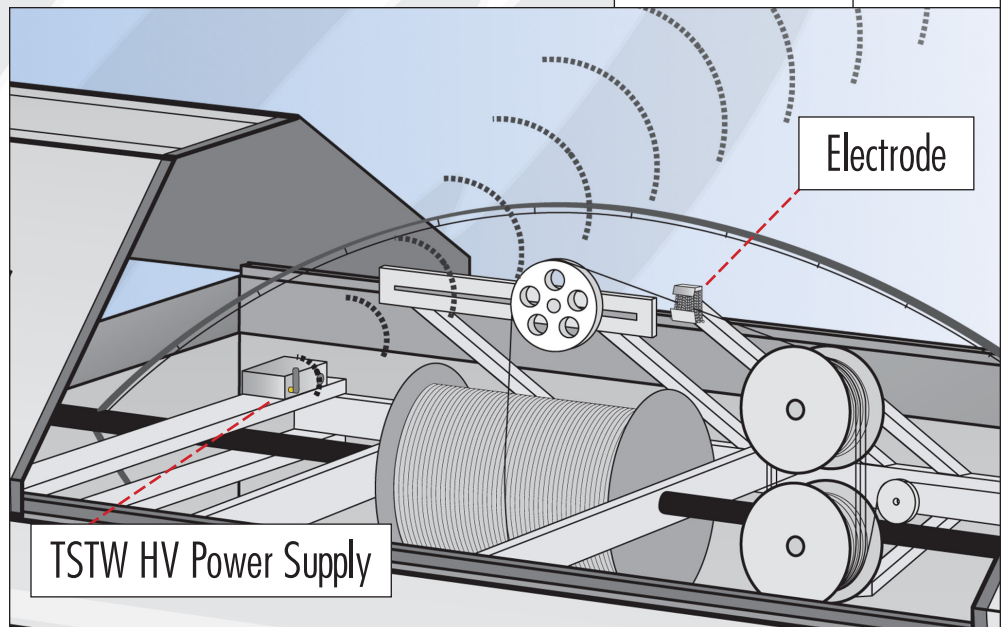


BRC-W control unit with TSTW HV power supply & electrodes

The Clinton TST-10W Wireless Digital D.C. Spark Tester instantly detects insulation damage to wire that can occur during the twinning operation. The TSTW high voltage power supply and miniature electrode sit within the rotating flyer of the twinning machine, identifying faults at the critical moment before the product is wound onto the takeup reel.

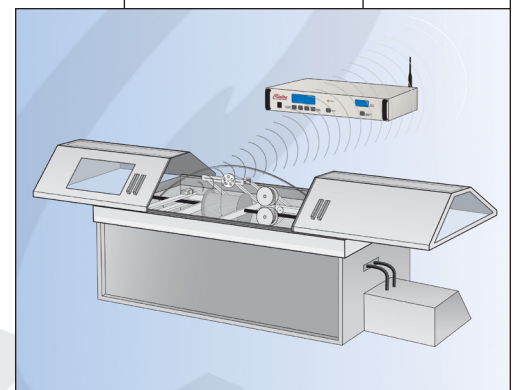
The wireless BRC-W control unit remains outside the twinner and may be located up to 50 feet away. Wireless communication between high voltage components and the control unit eliminates the need for troublesome control loop slip rings. A single slip ring can provide power to the test module if the required 24V signal is not readily available inside the twinner.

When damaged wire passes through the electrode, the wireless BRC-W control unit records the fault and provides process control outputs that can activate external lights or alarms, or stop the twinner. The fault detection circuitry



differentiates pinholes from bare wire based on wire line speeds entered by the operator or input through a standard encoder input port. The BRC-W control unit can also exchange commands with a PLC or computer through the RS-485 serial interface or optional analog port.

The Model TST-10W Wireless D.C. Spark Tester conforms to IEC-1010-1 and is CE approved.



TST-10W SPECIFICATIONS

Voltage Test Range Approx. 500 volts to 10KV D.C. For test voltages below 2000 volts, contact factory for electrode recommendation.

Voltage Display Graphics display, 2% accuracy.

Bare Wire Length Approximately half of electrode length. Line speed entered manually or through encoder port.

Fault Response Less than 1 millisecond.

Fault Resolution 5 milliseconds.

Output Current 1.5 milliamperes maximum.

Detection Sensitivity Less than 600 ua. at 5KV

Operating Modes Continuous HV/Remove HV on fault.
Momentary Process Control/Latch until Reset.
Fault/Pinhole & Bare.

Operating Indicators:

High Voltage ON Graphics display; high voltage ON relay.

Fault (pinholes and bares) 3-digit LED display; amber indicating light; fault relay.

Pinhole Graphics display

Bare Wire Graphics display; bare wire relay. Available when line speed is input manually or through encoder or tachometer.

Process Control Relay form "C" contacts rated 2 amps max. for both NO and NC circuits for: External Reset; HV ON; Fault; Bare.

Communications 2.4GHz Wireless Connection.
RS-485 Serial Interface.
Analog (optional).
Ethernet (optional).
Profibus (optional).

Electrode Options BD-051 Bead Chain. BR0.3-2 Brush (recommended for voltages under 2KV).

Dimensions:

BRC-W Control Unit 17.0"W x 7.58"D x 3.5"H (432 mm W x 192 mm D x 89 mm H)

TSTW HV Test Module 7.5"W x 6.5"D x 2.8"H (191 mm W x 142 mm D x 71 mm H)

Weight:

BRC-W Control Unit 6 lbs. (2.7kg.)

TSTW HV Test Module 3.5 lbs. (1.6 kg.)

Power Requirements:

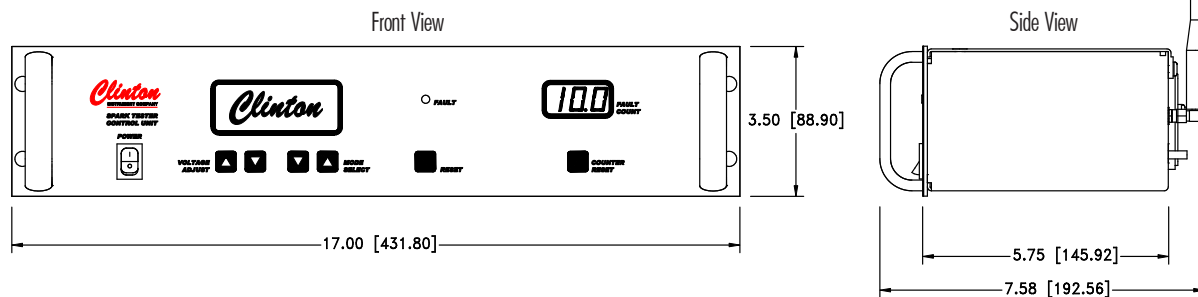
BRC-W 100 to 240V AC 1 amp 49-61 Hz. Self adjusting power supply.

TSTW 24V DC @ 2 amps max.

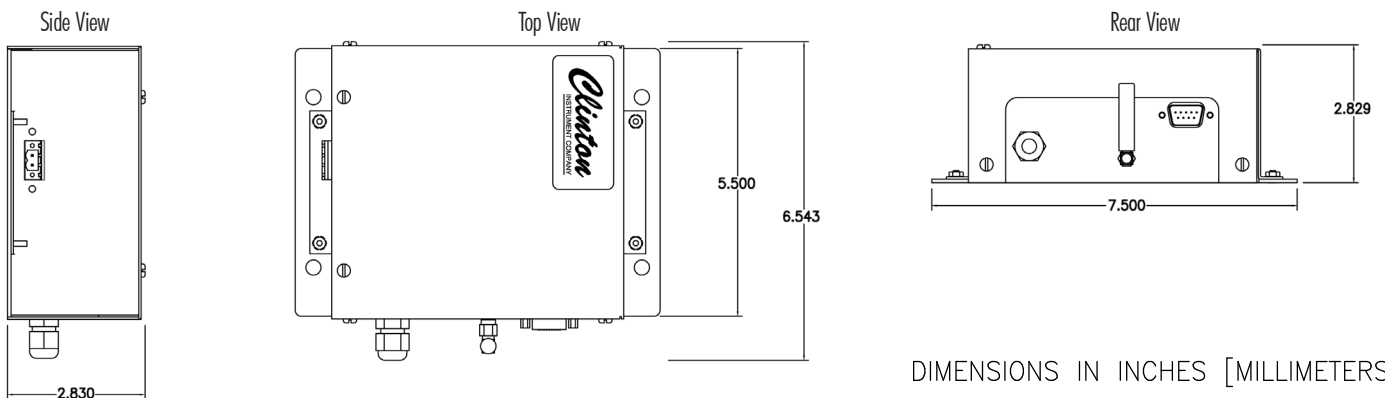
Safety Conforms to IEC 1010-1, CE Approved.
Protected by US Patent Number 6,977,509.

Please consult factory for help in choosing equipment for specific applications.

BRC-W Control Unit



TSTW High Voltage Test Module



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Specifications subject to change without notice. 06/12 EN