



AR TWISTERS

How they work...

■ TWISTERS PROTECT THE LINE FROM HIGH AMPLITUDE GALLOPING ■

Performance is derived from 3 elements:

Twisting the conductor – Twisting is achieved by installing the clamp from above the line. The Twister operates by using both vertical motion and the twisting motion around the center line of the conductor.

Eccentric weight – the weight (represented by the washers) are offset to the side so that any motion caused by wind will pick up the weight and cause the conductor to twist. This inertial force, acting on the Twister mass, is of sufficient magnitude to overcome any gravity force. The motion by the Twister helps change the wind angle of attack during a galloping event. Changing the wind angle of attack is a long accepted principal for galloping control.

Installation application – installed at the 1/3rd and 2/3rd points the dampers puts a node in the span. This placement transforms a single and double loop gallop into a harmless 3 loop sine wave.

Once the Twisters are installed, here's what to expect.

- **Twisters will remain in the set position which has added more twist into the conductor.** When galloping conditions occur, Newton's Law comes into effect. Motion up and down, combined with twisting about the conductor, serves to interrupt the galloping before it gets to high amplitudes.
- **No maintenance is required.** So long as the Twisters are installed with 50-55 ft. lbs. of torque on the 2 sets of hardware, the washers will remain secure as will the installation.
- **Service life.** Twisters have been in the field for more than 15 years. We have had to replace only a handful of the more than 40,000 units installed.

Demonstration of how Twisters work in service. [Case Study – Sandusky Ohio.](#)

In this field test, a simulated galloping event demonstrated how the Twister performs in galloping conditions. By simulating large amplitude galloping, a range of performance is evident. [This video shows](#) how the Twister may flip over from the set position to the other side of the conductor. It will return back to the set side – either during the current event or the next event. In either way, the extra twist remains on the line; ready for the next episode of galloping conditions.