Product Testing

Clamp Holding Tests | AR Clamp

Two AR Clamp models were tested for holding strength. Tests were completed at independent testing laboratories.



Subject

Two AR Clamp models were tested for holding strength. The A-Clamp, is a grip clamp used in all models of the AR Spacer Damper, Lightweight Spacer Damper, AR Spacer-Twister and the Twister | Slider. The N-Clamp is the grip model used in all models of the Twister and the Windamper[®].

Purpose

To determine if the test samples will slip from hold on a conductor and at what measure slippage occurs. To determine compression and tensile strength of the clamps.

Slip Testing

Standard production AR damper clamps were attached over armor rods to a simulated conductor. The O.D. including armor rods was 1.7 inch. The subject was mounted at the top of the crosshead of the Baldwin tensile testing machine. The bottom end of the conductor was supported at the test machine table, while the top end was clamped to the subject. Tests were conducted for two positions of the AR Clamp – weight fixed (N-Clamp) and weight loose (A-Clamp.) Both clamp models were tested at a torque of 50 ft. lbs.

Compression and Tensile Testing

A-Clamps were secured in test bed and tested to failure in compression

Results

Clamp slipped at a tensile load of	Alligator grip clamp	1,000 lb.
	Nutcracker grip clamp	1,200 lb.
Rated strength of clamps	Compression	4,000 lb.
	Tension	5,500 lb.