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PRODUCT PROFILE # 519D

2614875-A01 Cut Simulator Tool

2647132-A01 Cut Simulator Tool for Painted / Coated Fences

The Cut Simulator Tool is used to perform testing of the INTREPID™ MicroPoint™ Cable, MicroPoint II, MicroNet™, MicroNet II and MicroPoint POE-S fence-mounted Perimeter Intrusion Detection Systems (PIDS) manufactured by Southwest Microwave.

This tool simulates a cut attempt to the fence fabric by providing a mechanical impact without causing damage to the fence fabric. Our Engineers designed this tool to create a repeatable signal level when used in a consistent manner, and to replicate the signal generated by fence cuts made by an 8” (20cm) and 18” (46cm) bolt cutter, as measured by an oscilloscope, spectrum analyzer and sensor software. Fence fabric was cut at the ground line 10 times with each bolt cutter. The cut simulation tool was then used at the same location and adjusted to replicate the signal generated by the bolt cutters.

The tool is meant to provide uniform testing along the complete perimeter no matter who is performing the test and to reduce variations in testing caused by inconsistent test methods such as hitting the fence with a screwdriver, kicking the fence or tapping with some other object. The impact provided by the tool is the same regardless of the size of the person doing the test. The tool can be used for both functional and performance testing as outlined in the product manuals, and provides repeatable results on chain link, weld mesh, expanded metal or rigid fence fabrics.

The Cut Simulator Tool consists of a stainless-steel rod that is housed within a stainless-steel tube along with a heavy-duty spring. A trigger device is mounted to the rod which has three settings: notch 1 simulates an 18-inch (46cm) bolt cutter, notch 2 simulates an 8-inch (20cm) bolt cutter and notch 3 simulates a gross attack. Due to the inherent signal attenuation caused by vinyl or plastic-coated fences, Notch 3 should be used for testing these fence types. Locking the trigger into one of the three settings controls the spring tension. When the trigger is released, the spring forces the rod against the stainless-steel end cap causing the impact to the fence fabric. The weight of the tool is 0.5 lbs.

For painted or coated fences, a Delron-tipped version of this tool is available to prevent chipping or marring of the fence finish. For complete operating instructions, refer to the appropriate Testing Procedures available from Southwest Microwave.

