



UNC CHARLOTTE

Department of Engineering Technology

# LABORATORY SAFETY ANALYSIS

## OPERATING CUTTING /STRIPPING WIRE CUTTERS


Location: All Smith Electrical/Computer Engineering Technology Labs.

Required Training: Cutting/stripping wire cutters are designed and intended for use by properly trained and experienced operators. If you are not familiar with the proper and safe operation of the equipment, do not use until proper training and knowledge have been obtained.

Required Personal

Protective Equipment (PPE): Safety glasses closed toed shoes.

Reference Materials: Manufacturer's safety rules and operating instructions

PHOTOS	TASK	HAZARDS	CONTROLS
	Wear clear safety glasses with side shields.	Flying debris	<ul style="list-style-type: none"> <li>Students are required to provide their own safety glasses.</li> <li>See laboratory instructor or laboratory manager if you do not have safety glasses before proceeding to use equipment.</li> </ul>
	Inspect safety glasses for cracks, scratches or other damage. Ensure the ANSI standard Z87.1 is stamped into the side of glasses.	Flying debris	<ul style="list-style-type: none"> <li>If defects are found report this to your lab instructor before using.</li> </ul>
	Put on PPE	Flying debris	<ul style="list-style-type: none"> <li>Always wear safety glasses.</li> </ul>
	Inspect work area.	Slips, trips & falls.	<ul style="list-style-type: none"> <li>Keep the work area free from scraps, dust, oil and grease.</li> </ul>
	<p>When stripping wires, this action sometimes causes pieces of wire or plastic to fly through the air.</p> <p>When electrical wire is joined to other wires or connected to a terminal, the insulation needs to be removed.</p>	Injury and Pinch points, Flying debris	<ul style="list-style-type: none"> <li>Check the full range of motion of the wire strippers to ensure adequate operation.</li> <li>Wire stripping pliers have sharp edges and require a tight grip. Do not trap your skin between the jaws; otherwise you risk a severe cut.</li> <li>When removing the insulation from wire, push away from your body rather than pulling the stripper toward you.</li> </ul>

	An insulating layer of plastic covers electrical wire.	Injury and Pinch points, Flying debris	<ul style="list-style-type: none"> <li>• Never use a sharp blade or knife to remove insulation. You can cut yourself seriously if the blade slips.</li> <li>• Wire stripping tools come in various configurations. They all perform the same task. The type of tool you use or purchase will depend on the size of the wire you are stripping.</li> </ul>
	Strip the wire.	Struck by, flying debris.	<ul style="list-style-type: none"> <li>• Always wear safety glasses.</li> </ul>
	Clean work area and return all PPE to a clean, dry storage area.	Injury	<ul style="list-style-type: none"> <li>• Ensure adequate housekeeping measures to prevent accidents</li> </ul>

For more information about this LSA, contact the *Department of Engineering Technology* at UNC Charlotte (704) 687-2305  
 Please visit our website at: <http://www.et.uncc.edu>

***The development of Laboratory Safety Analyses is a very effective means of helping reduce incidents, accidents, and injuries in the workplace. It is an excellent tool to use for training purposes and can also be used to investigate "near misses" and accidents.***