

## Electro-Hydraulic Cutter

Y/N

<ol style="list-style-type: none"><li>1. The tool should be designed to be a hydraulically operated piston activating mechanical joints symmetrically to open or close a set of two opposite blade arms whereby cutting surfaces go on top of each other without making contact thus enabling objects to be cut.</li><li>2. The Electro-hydraulic device does not need to be connected to an external hydraulic source; generation of required hydraulic pressure takes place within the body of the device by either a quick exchange battery or an external power supply. ( see spec on external power supply)</li><li>3. The electro-hydraulic tool shall be equipped with lights to facilitate work under poor lighting conditions. The lights must be powered by the same battery that powers the electro-hydraulic tool and not a secondary battery.</li><li>4. The cylinder of the tool shall be made of anti-corrosive light aluminum alloy for its lightweight, strength and long life. The body of the tool shall have a high impact, non-metallic housing. The housing shall have ventilation holes on both sides of the unit for cooling the motor.</li><li>5. The maximum cutting opening at the tips will be 8 inches.</li><li>6. The cutter will be of slightly curved blade geometry for pulling the debris away and to the center with intelligent cutter geometry reducing tool movement and providing maximum cutting performance.</li><li>7. The blades shall be made of high quality dropped-forged steel and are regrind able. The blades of the tool should be attached to the piston rod via removable links for ease of repair. The pivot points of the blades shall have a rubber boot by hand guard for safety purposes.</li><li>8. The engineered curved blades with sophisticated geometry close at the tips and then pull the object to be cut towards the point where the maximum cutting force is applied to the relevant working range providing superior cutting performance and significantly reducing cutter wear.</li><li>9. The cutting performance of the tool shall be able to cut up to 2 inch diameter round stock steel.</li></ol>	
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10. The tool shall have a dual pilot check valve to prevent accidental movement of the blades in the event of power loss.
11. The control mechanism shall have a control actuator for ease of operation by allowing 360 degree operations in any position. The mechanism shall be separate and independent from the handle to provide added control in close-quarter operation.
12. The tool must provide a “dead man” actuator, whereby the unit stops functioning when thumb pressure is released.
13. The opening and closing position shall be clearly marked.
14. The tool shall be protected by a pressure relief valve that prevents it from being over pressurized.
15. The tool dimensions without the battery shall not be any longer than 40 inches, wider than 12 inches or higher than 11 inches.
16. The maximum operating pressure to the tool will be 12,000 psi (80MPa) (800 bar).
17. The nominal electrical voltage (with power supply) is a minimum of 24 V. The nominal electrical voltage (with battery) is 24 V.
18. The tool shall be able to tolerate an ambient temperature range of -5°F up to +130°F.
19. The tool must be NFPA 1936; 2015 Edition certified and shall be labeled as such bearing the mark of the testing agency.
20. Cutting classification should no less than A8 / B9 / C8 / D9 / E9 as defined in NFPA 1936; 2010 and certified by a 3<sup>rd</sup> party testing agency.
21. The tool will not weigh more than 50 lbs excluding the power supply.
22. The tool shall be protected by a pressure relief valve that prevents it from being over pressurized.