

Product Specifications

SC 757 E2 – 362R542

ELECTRO-HYDRAULIC COMBINATION TOOL

1. The tool is a designed hydraulically activated piston with two equal, opposite blade arms that are symmetrically opened by mechanical joints, thereby spreading, squeezing, pulling or cutting objects.
2. Electro-hydraulic devices do not need to be connected to an external hydraulic source, generation of the required hydraulic pressure takes place within the body of the device by either a quick exchange lithium/ion battery or an external power supply.
3. The electro-hydraulic tool is equipped with lights to increase visibility under poor lighting conditions. For simplicity, the lights must be powered by the same Lithium-Ion battery that powers the electro-hydraulic tool and not a secondary battery
4. The cylinder of the tool shall be made of anti-corrosive light aluminium 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. The protective housing shall protect the battery from being damaged protect the operators hand from being pinched between object and the tool
5. The maximum spreading force shall be up to 292,000 lbf (1300 kN). NFPA HSF test point produced 11,000 lbf (49 kN), the LSF test point produced 8,770 lbf (39 kN).
6. The tool shall produce a spreading distance up to 17.7 in (450 mm) measured at the blade tips.
7. The tool shall produce a maximum pulling force of 22,000 lbf (98 kN). NFPA HPF test point produced 14,800 lbf (66 kN), the LPF test point produced 10,800 lbf (48 kN).
8. To maximize the capability of the combination tool the unit should utilize an optional chain and shackle package for pulling operations, use only HURST chain set KSV 13 along with a the necessary pulling attachment.
9. The tool shall produce a pulling distance of 11.7 in (297 mm).
10. The tips are to be removable, multifunctional tips that can be used for spreading, peeling, squeezing and pulling without the need to be changed.
11. The removable tips shall have "Sharks Tooth" aggressive design for maximum performance and gripping capability
12. The maximum cutter opening shall be 14.5 in (369 mm).
13. The blades of the tool shall be of a straight serrated edge design for maximum cutting performance. The blades of the tool shall contain shackle holes for pulling applications. The blades of the tool should be attached to the piston rod via removable links, for ease of repair, efficient power transmission and smooth operation. The blades shall be made of heat treated, shock resistant, forged tool steel. The pivot points of the blades shall have rubber boot hand guard for safety purposes.
14. The control mechanism shall feature a star-grip control actuator for ease of operation by allowing 360 ° operations in any position. The tool must provide a non-interflow shear seal "dead man" actuator, whereby the unit stops functioning when thumb pressure is released. The star grip automatically returns to the central position, guaranteeing the full load-holding.
15. The tool shall have (2) two handles for ease of operation in any position. One shall be located toward the center of the tool to create an even balance. The second handle shall be located below the control mechanism and be an integral part of the protective housing and allow for easy operation of the Star Control with the thumb of the operator.
16. The tool will be equipped with a dual pilot check valve. This is to prevent accidental movement of the arms in the event of power loss.
17. The tool shall be protected by a pressure relief valve that prevents it from being over pressurized.
18. The tool dimensions without the battery shall not be any longer than 40.7 in. (1033 mm), wider than 11.6 in (294 mm) or higher than 11.2 in (285 mm).
19. The maximum operating pressure to the tool will be 10,200 psi (70 MPa) (750 bar).
20. The nominal electrical voltage (with power supply) is 25 V. The nominal electrical voltage (with lithium/ion battery) is 25.2 V.
21. The estimated current consumption at nominal voltage is 12 amps at idle mode and 42 amps at maximum load.
22. The noise level in idle mode shall be 69 dB(A) and 71 dB(A) in maximum load.
23. The tool shall be able to tolerate an ambient temperature range of -4°F (-20°C) up to +131°F (+55°C).
24. The tool must be NFPA 1936; 2015 Edition certified and shall be labelled as such bearing the mark of the testing agency.
25. The tool shall have an IP protection class rating of 54.

26. Cutting classification should be no less than A8 / B9 / C8 / D9 / E9 as defined in NFPA 1936;2015 and certified by a 3rd party testing agency.
27. The tool will not weigh more than 52.9 lbs (24.5 kg) excluding the power supply.

RESCUE TOOL SYSTEM
SPECIFICATIONS

The equipment specified in this bid must all be designed and warranted for use on the Hurst JAWS OF LIFE rescue tool systems- no exceptions. All of the tools and other equipment must be designed and warranted to work with and be interchangeable with the existing Hurst tools in use by the Sorrento Fire Department. All tools and applicable items must be NFPA 2010 compliant. If bidding other than specified brand, bidders must enclose with their bid two (2) copies of detailed manufacturers specifications on the product bid including a complete list of any deviations from the specifications listed. Standard sales brochures are not acceptable.

Comply: _____ Exception: _____

Tools and components must be NFPA 1936, 2010 edition, compliant. Each tool and component shall have a label denoting compliance, as applicable. The manufacturer of the hydraulic tools shall be ISO 9001 and 14001 certified. Tools will operate on Hurst Blue synthetic, fire resistant hydraulic fluid and operate at a max. pressure of 5000 psi.

Comply: _____ Exception: _____

JL-SE 230 volt simo, dual tool power unit: p/n: 37576000:

- * Units to have top mounted, gravity feed hydraulic fluid tank for faster performance.
- * Units to operate two tools simultaneously with two independent dump valves.
- * Unit to have a turbo mode selector valve to increase speed and double flow on chosen line.
- * Units to have flow rate of 3.45 *Um* in simo and 6.2 *Um* in turbo.
- * Unit to operate only on Hurst BLUE synthetic hydraulic fluid.
- * Dimensions: 18.9"l x 17.3"w x 17"Stlh, weight 70 lbs.
- * Unit to have steel tubular roll cage surrounding engine, pump, and reservoir.
- * Unit to have two female Streamline connectors mounted on unit.
- * Fluid capacity to be 1.45 gal.

2 ea. p/n: 101R073 adapter:

* Adapter to be equipped with standard quick disconnect fittings, 20 inch hoses, and 128R118 Streamline fitting.

Comply: _____ Exception: _____

1 ea. ML-28 Defender spreader- QD (p/n:362R534):

- * Tool to have spreading distance of 28 inches.
- * Tool to have spreading force of 44,000 lbs.
- * Tool to have pulling force of 20,000 lbs.
- * Weight not to exceed 48 lbs.
- * Operating mechanism to be star grip to be "dead man"¹¹ type whereby tool stops when released. Star grip allows operation from any angle. Twist grip (motorcycle style) are not acceptable because they are exposed and can become stuck during rescue operations.

- * Star grip must be separate and independent from rear handle.
 - * Jaw tips are to be field removable for service and cleaning.
 - * Jaw tips will have holes for attachment of chain shackles and attachments.
 - * Tool will be designed and warranted to operate from all Hurst power units.
 - * Tool to be equipped with mounting bracket.
- Comply: _____ Exception: _____

Model Tele-41 Telescoping ram- QD (p/n: 257R156):

- * Spreading force: 29,830lbs.
 - * Length closed: 18.9 in.
 - * Length fully extended: 41.5 in.
 - * Operating mechanism to be star grip to be ¹¹dead man¹¹ type whereby tool stops when released. Star grip allows operation from any angle. Twist grip (motorcycle style) are not acceptable because they are exposed and can become stuck during rescue operations.
 - * Star grip must be separate and independent from handle.
 - * Ram to have dual pilot check valve for maximum load holding ability.
 - * Control valve to be enclosed for protection and safety.
 - * Ram to be equipped with mounting bracket.
- Comply: _____ Exception: _____

Hurst rescue tool warranty and training:

- * All tools will have a two-year parts and labor warranty, and lifetime warranty on parts (10 years). Li-ion batteries will have a one (1) year warranty.
- * All tools will have tags attached indicating **NFPA 1936** compliance.
- * All tools will be warranted as **RESCUE TOOLS** specifically for the purpose for _____ which they have been designed.
- * Factory warranty must be supplied with bid.
- * A training class will be conducted for the department at their location.
- * Training will be provided by a Hurst certified instructor.
- * Training to be provided at no charge with refresher class available as needed.
- * Training will cover vehicle rescue and extrication techniques, safety procedures, and operation and care of the tools.
- * Training will be eligible for **EMT continuing education credit and meet NFPA 1670** objectives.
- * All tools and equipment must be delivered completely set up and operational.
- * Repairs and service of equipment will be performed by a Hurst factory authorized service center on site at the fire department when feasible.
- * Loaner tools will be supplied at no charge if any tools are removed from service for repairs, even after the warranty period ends.

Comply: _____ Exception: _____

List and explain exceptions to specifications here: