

## Lithium Ion Battery Powered Hydraulic Spreader Specifications

- The tool consists of a hydraulically operated piston that symmetrically drives mechanical linkages to open or close two arms to spread or squeeze objects.
- Hydraulic power for the tool is generated internal to the tool via a hydraulic pump that is operated by an electric DC motor. The DC motor is powered by 60V Lithium ion battery or an external AC to DC power supply.
- As standard, the tool shall be equipped with a lightweight tubular forward handle. The tool shall be optionally equipped with machined aluminium forward handle with two integrated LED lights to facilitate work under low light conditions. The lights must be powered independently of each other to provide built-in redundancy. The lights shall have 3 intensity levels (low, medium, high). The lights shall be fully isolated from the rescue tool battery and be powered using commonly available CR123 batteries. The lights shall power off automatically after 15 minutes of inactivity to conserve battery life.
- The spreader shall produce a maximum spreading force of up to 31,940 lbf (142.1 kN).
- This tool shall have Highest Spreading Force (HSF) of 12,720 lbs (56.6 kN).
- This tool shall have Lowest Spreading Force (LSF) of 6,610 lbs (29.4 kN).
- The tool shall have Highest Pulling Force (HPF) of 9,590 lbs (42.7 kN)
- The tool shall have Lowest Pulling Force (LPF) of 4,960 lbs (22.1 kN)
- The tool shall have a maximum spreading distance of 28 in (711 mm).
- The standard tips on the tool shall be stainless steel cast with an aggressive “Gator Grip” pattern that grips sheet metal during operation. The tips shall have bevelled edges which prevent sheet metal from tearing during operation. The spreader shall incorporate quick release push-buttons that enable tips to be changed easily.
- For increased capability and functionality, the tool shall accept AMKUS Extended Reach Tips which provide an additional 8 inches of spreading distance. The tool shall also accept the AMKUS Quick Adjust Chain Kit for pulling operations.
- The cylinder, body and housing of the tool shall be made of aluminium alloy for its lightweight, strength and durability. The housing that encloses the motor, pump, and electronics shall not be constructed of plastic or other non-metallic materials due to the inferior durability and heat dissipation properties of these materials.
- The tool must include a “dead man” actuator, whereby the unit stops functioning when the operator releases hand or thumb pressure from the actuator. The actuator shall possess a stainless steel guard plate to reduce or eliminate accidental or unwanted activation of the mechanism.
- The tool shall be protected by a pressure relief valve that prevents over pressurization.
- The tool shall have a pressure port that allows a technician to check the output pressure of the pump during routine maintenance.
- The maximum nominal operating pressure of the tool will be 10,152 psi (700 bar).
- The nominal electrical voltage supplied by the lithium ion battery shall not be less than 60.0 V.
- The tool shall be powered by a non-proprietary 60 volt DeWALT lithium ion battery. Each tool shall be provided with two 60V 6.0 Amp-hr DeWALT batteries and one 110V DeWALT battery charger.
- The battery shall be located on the top of the tool and have a side discharge for easy installation/removal.
- The tool dimensions without the battery shall not be any longer than 32.9 inches (836 mm), wider than 11.1 inches (282 mm) or higher than 9.6 inches (244 mm).
- The tool shall not weigh more than 49.9 lbs (22.6 kg) excluding the battery.
- This tool shall be compliant to NFPA 1936:2015 Edition.