

## Lithium Ion Battery Powered Hydraulic Combi Tool Specifications

- The tool consists of a hydraulically operated piston that symmetrically drives mechanical linkages to open or close two arms with blades to cut, 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.
- The tool shall be equipped with two LED lights integrated into the forward handle 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 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 shall produce a maximum spreading force of up to 153,870 lbf (684 kN).
- This tool shall have Highest Spreading Force (HSF) of 8,920 lbs (39,7 Kn)
- This tool shall have Lowest Spreading Force (LSF) of 6,650 lbs (29.6 Kn)
- The tool shall have a maximum spreading distance of 15.5 inches (394 mm).
- The maximum cutter opening shall be 7.3 inches (185 mm).
- The tool arms/blades shall be made of solid machined steel. The arm/blade linkages shall be covered by a rubber guard for safety purposes.
- The center bolt heads shall be flush with the tool allowing the tools to fit into tight spaces during operation.
- The tool shall include a pilot check valve to prevent accidental movement of the arms/blades in the event of power loss.
- 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 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 33.9 inches (861 mm), wider than 9.5 inches (241 mm) or higher than 9.5 inches (241 mm).
- Cutting classification should be no less than A6 / B7 / C6 / D7 / E7 as defined in NFPA 1936:2015.
- The tool shall not weigh more than 48.1 lbs (21.8 kg) excluding the battery.
- This tool shall be compliant to NFPA:2015 Edition.