

HCL SERIES CLAM GRAPPLE



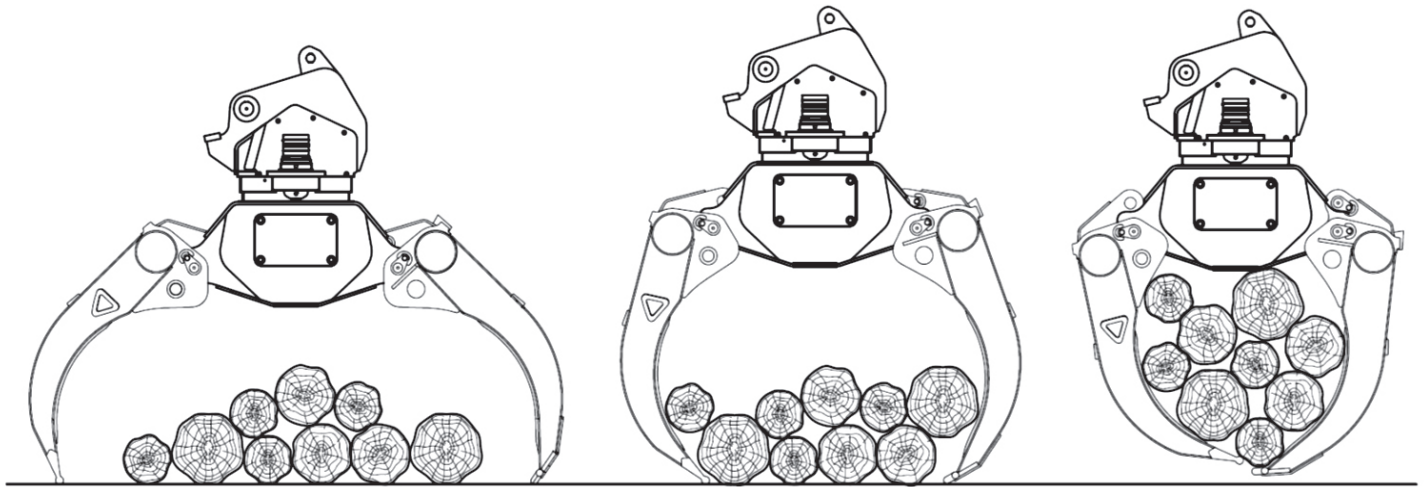
Weldco-Beales Manufacturing's HCL (Horizontal Cylinder and Linkage) Series Clam Grapples, are designed to handle high volume cut-to-length wood in loading and unloading applications.

First in the industry to combine the performance and versatility of a basket style (bunching) grapple jaw arrangement with the proven efficiency of a "power tilt/controlled head" excavator grapple.


FEATURES & BENEFITS

- Basket style jaws are designed to open wide enough to expand a trailer bunk, but also close down to pick a single stem
- Grapple jaws lift and roll the load into a tight round bundle, minimizing stem crossing to achieve faster fill-times
- Designed to match machine capacity, wood length and species (payload) for optimal performance and efficiency
- High strength (alloy) steel construction for optimum payload through superior strength to weight ratio
- Box section jaw profile allows maximum efficiency and easy log flow during loading and unloading
- Open jaw and torque tube design provide excellent visibility and torsional strength
- Single, 5000 psi, high pressure horizontal hydraulic cylinder and timing linkage (HCL) keeps the jaws synchronized at all times, and delivers power to the jaw that needs it most during the loading cycle
- Easy access for greasing and service
- Nose pieces on jaw tines, and round wear bar on leading edge add strength and protection to prevent wood damage
- Cushioned cylinder for smooth operation when fully opening the grapple
- Large area "hard" stops on the jaw cross tubes provide a mechanical stop in the closed position
- Excellent log retention and load balance due to wide stance frame, allowing the load to be "penciled" with ease (no outriggers necessary)
- All pin joints are bored after welding for proper alignment and optimized durability
- Chromed and induction hardened pins are oversized for maximum service life
- Cylinder piping and hosing fully protected inside the pivot frame

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EX300/400 HCL M GRAPPLE SPECS

PART #	148-524-xxxx	
GRAPPLE WEIGHT	6,000 – 8,000lb	
BEARING SIZE	Medium (27")	
DRIVE	 1 or 2 x Eaton VIS	
DRIFT CONTROL	Shuttle Valve	
OPERATING PRESSURE / FLOW	3,000 / 3,500psi / 28 - 34 gpm	
ROTATION TORQUE	SINGLE 169,475" / lb	DUAL 338,950" / lb
HOLDING TORQUE	SINGLE 197,725" / lb	DUAL 395,500" / lb
ROTATION SPEED	SINGLE 16 - 20 rpm <i>(restricted to 12 rpm)</i>	DUAL 8 - 12 rpm
CLAMP CYLINDER	Single 6.0" / 150mm HP	
SPEED – OPEN	approx. 4.5 seconds @ 40gpm	
CLOSE	approx. 3.5 seconds @ 40gpm	
JAW TIMING LINK	Fully Synchronized	
HINGE PIN	3" / 76mm	
CYL / LINK PIN	3" / 76mm	
TINE CONSTRUCTION	Box section	

14.5 & 20 SQ. FT. DIMENSIONS

	14.5 SQ. FT.	20 SQ. FT.
WEIGHT	5,975 lbs	7,300 lbs
OPEN	120"	139 5/16"
CLOSED	6"	8 5/16"
WIDTH	52-3/4"	52 3/4"

OPTIONS

- Customer-specified lugging
- Tool cylinder and tool cylinder float valve
- Head "balancing" valve
- Hydraulic control valve in head
- Additional hydraulic function and 4 port manifold (swivel) for add-on making it "saw ready"
- 3 tooth inner jaw for when additional clean-up is required
- Weldco flexdrive system: single or dual drive motors to provide the desired speed and torque
- Ring gear "auto lube" to eliminate hand lubrication
- Rotation float valve (integral on motor crossover relief block) - an industry first
- Alternate jaw profile and capacity to suit application (loading, sorting, hoe chucking/forwarding)