

ALAMO INDUSTRIAL ♦
Specifications
Versa ♦ 74" Flail Mower

The purpose of this specification is to describe a side-mounted, hydraulically powered, 74" flail mower. The bid unit shall be the manufacturer's current production that meets or exceeds the following minimum specifications. Only a standard production machine can be bid on these specifications and a supplier will not be allowed to modify his standard production unit in order to meet these specifications.

FRAME:

The unit shall be mid-mounted between the front and rear wheels of the tractor. The mainframe shall be welded steel plate braced to the front bolster and rear axle. The frame shall be capable of interchanging with a boom, side-mount mower, and side-mount ditcher.

HYDRAULIC RESERVOIR:

The Versa Flail shall use a 60-gallon hydraulic oil reservoir tank.

FILTER:

The suction line filter shall be 100-mesh.

The main in-tank filter shall be 10-micron, 75 GPM full-flow with restriction gauge.

MOWER LIFT ASSEMBLY:

The lift cylinder shall be single acting, 3-1/2" x 9" x 1-1/2".

The tilt cylinder shall be single acting, 3-1/2" x 6-3/16" x 1-1/2".

The mower shall be capable of mowing from 90-degrees up to 45-degrees down.

(Specifically excluding a cable and pulley combination lift assembly.)

The mower shall be capable of raising 17" vertically to 6" below grade.

HYDRAULICS:

The unit shall use a tandem, open-loop pump with steel gears rated at 65 GPM at 2,400 RPM. (Note: The equipment operates at 51-GPM at 1900-RPM.)

The hydraulic motor shall be gear-type and rated at 76 hp at 3000 PSI.

The valve (to mower head) shall be two position (electric solenoid controlled with direct acting relief valve) with 1-1/4" porting, 2500 PSI.

The driveshaft assembly shall be rated at a minimum of 184 ft. lbs. torque (rear PTO pump drives available).

The suction line shall be 1-1/2" in diameter.

The motor circuit hoses shall be 1-1/4" in diameter.

The valve, for raising and lowering the mower) shall be 2-spool, open center, tapered, positive metering with adjustable main relief valve.

MOWER:

The cutting width shall be 74".

The deck shall be constructed of 10-gauge steel.

The side plates shall be 1/2" thick inboard and 5/16" thick outboard.

The skid shoes shall be full-length and replaceable.

CUTTERSHAFT:

The cuttershaft shall be a 4-1/2" balanced tube, with 5/16" thick wall with 4-rows of knives.

The knife tip speed shall be 8300 FPM.

The mounting shall provide anti-jamming seal. (Rubber shock mount will not be acceptable.)

The 74" flail mower shall have 36-pair of 3-oz. coarse cut knives. Fine cut and extreme cut knives shall be available as an option.

CUTTERSHAFT BEARINGS:

The cuttershaft bearings shall be greaseable, sealed, self-aligning 1-15/16", rated at 3300 lbs. The bearings shall be attached to the housing with 6, grade 5, 3/8" bolts. The bearing flange may be used as a bearing puller. Pillow block bearings shall not be acceptable.

REAR ROLLER:

The rear roller shall be a full-length tube, 6" in diameter with a 1/4" wall, rated at 6000 lbs. The cutting height shall be adjustable from 0" to 6".

ROLLER BEARINGS:

The roller bearings shall be hex shaped, 1-1/3" across the corners, self-aligning with cast steel cap outboard and neoprene seal inboard. (External bearings not acceptable.)

ROLLER ADJUSTMENT BRACKET:

A labyrinth seal formed by recessed tubing protecting the bearing from foreign material shall be used.

The 1/2" x 6" formed roller brackets shall be attached by 4, 1/2" grade 5 carriage bolts.

TRASH DEFLECTOR:

Front and rear deflectors shall be used.

KNIVES:

Coarse cut knives; reversible and self-cleaning shall be used.

Knife dimensions shall be 1-3/4" x 3-5/16" x .1046" thick, weighing 3-ozs. each.

The 74" flail mower shall have 36-pair, mounted back-to-back.

Knife construction shall be 1-3/4" x 3-13/16" mounted on forged heat-treated rings.
