



TECHNICAL SPECIFICATIONS

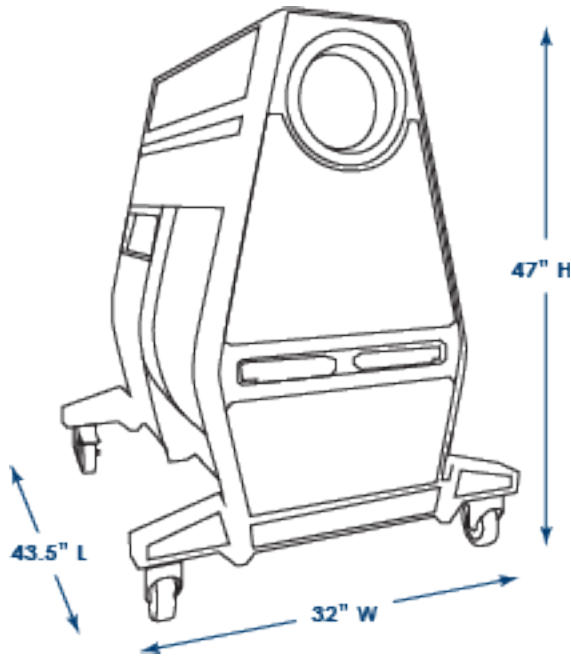


MOBIUSTRIMMER.COM

DESIGNED AND BUILT
for
COMMERCIAL SCALE CULTIVATORS

UPDATED: OCTOBER 16, 2020

SPECIFICATIONS & REQUIREMENTS SUMMARY



DIMENSIONS

Total width is 43" with Trim Tote in place.

Total length is 77.5" with input and output shrouds in place.

WEIGHT

462 lbs

ELECTRICAL REQUIREMENTS

SINGLE PHASE: 240v, 30amps

THREE PHASE: 208v, 22amps

POWER

VACUUM MOTOR: 5HP

CUTTER MOTOR: 0.75HP

TUMBLER MOTOR: 1/8HP

OUTPUT

WET FEED RATE:

- 66 - 120 lbs/hr
- 30 - 55 kg/hr

DRY FEED RATE:

- 30 - 60 lbs/hr
- 13 - 30 kg/hr

ASSEMBLY DIMENSIONS

COMPONENT	DIMENSIONS	WEIGHT
Mobius <i>without</i> Input Hopper, Output Chute or Trim Tote in place*	43.5" L x 32" W x 47" H*	391 lbs.
Mobius <i>with</i> Input Hopper, Output Chute and Trim Tote in place	77.5" L x 43" W x 46.5" H	458 lbs.
Body Assembly only	43.5" L x 32" W x 36.75" H	284.3 lbs.
Lid Assembly (includes tumbler, brush, lid screens and polycarbonate cap)	42" L x 14.75" W x 11.75" H	51 lbs.

For set up with conveyors, with no tilt angle on the machine:

Height to bottom of tumbler opening	34 ¹ / ₈ "
Height to centre of tumbler opening	37 ³ / ₄ "

* Note, the M108S will fit through a standard 32" door opening

NOISE RATINGS

COMPONENT	OPERATING RANGE	RATING
Vacuum	1 – 11	77 – 92 decibels
Blades	1 – 11	82 – 88 decibels
Tumbler	1 – 11	70 – 72 decibels
Full Machine	All systems at minimum	82 decibels
Full Machine	All systems at maximum	93 decibels

COMPONENT DIMENSIONS & WEIGHTS

COMPONENT	DIMENSIONS*	WEIGHT
Tumbler	42.25" L x 8.25" Diam.	2.5 lbs.
Input Hopper	18" L x 16" W x 14.75" H	4 lbs.
Output Chute	18" L x 16" W x 15" H	4 lbs.
Brush	36" L x 2.5" Diam.	2.7 lbs.
Trim Tote	13 USG / 49.2 L	4 lbs.
Helical Blade	37.25" L x 2.25" Diam	15 lbs. x 3 blades
Bedknife	35.25" L x 1.75" W x 1.5" H	2.7 lbs. x 3 knives
Spacer Bar	35.25" L x 1.75" W x 1.5" H	2.6 lbs. x 3 retainers
Fan Housing	38.25" L x 6.25" W x 22.75" H	19 lbs.
Separator	38.25" L x 14.5" W x 22.75" H	34 lbs.

* Note that, as most parts are asymmetrical, minimum packing dimensions have been provided.

TUMBLER TILT RANGE


AUTOMATIC TUMBLER TILT	RANGE
Angle	0° – 6.5°

MATERIALS AND TREATMENTS

The following is a partial list of the materials and treatments used in the manufacture of the plant-touching components of the Mobius M108S Trimmer. For full details, please refer to the [M108S Material Specifications](#).

PART(S)	MATERIAL & TREATMENT
Helical Blade	4140 Alloy Steel, Carbon Steel 1045 CR, nitrided
Bed Knife	UHB SS716 Stainless Steel
Screens	3003-H14 Aluminum, anodized
Aluminum Extrusion Parts	6063-T6 Aluminum, anodized
Aluminum Flat Plates & Sheet Metal Parts	5052 Aluminum Sheet Metal
Stainless Steel Separator	304 Stainless Steel
Tumbler Body	316 Stainless Steel Wire
Top Lid Screen & Separator Window	Hardened & Coated Polycarbonate (Lexan™ MR10)
Tumbler End Caps	Tritan™ Copolyester TX1501HF
Tumbler Rings	Nylon 6
Brush	304 Stainless Steel shaft, Nylon 612 bristles
Input Hopper & Output Chute	ABS (Acrylonitrile-Butadiene-Styrene) Plastic
Trim Tote	HDPE 2 (High-density Polyethylene)
Trim Tote Gasket	EPDM Sponge Rubber
Electrical Box Filter	MERV6, 1/2" thick
Aluminum Fan Housing Filter	MERV8, 3ply
Stainless Steel Fan Housing Filter	MERV8, 3ply

POWER SPECIFICATIONS & REQUIREMENTS

COMPONENT	SPECIFICATION / REQUIREMENT	
Vacuum Motor	5 HP	
Cutter Motor:	0.75 HP	
Tumbler Motor:	1/8 HP	
Electrical Requirements	THREE PHASE 208V, 22 amps Connect to a 30amp breaker or larger	SINGLE PHASE: 240V, 30 amps Connect to a 35amp breaker or larger
M108S Power Receptacle	L15-30R  X L1 Black Y L2 Red Z L3 White G Green	X L1 Black Y L2 Red G Green

INDICATOR LIGHTS & SENSORS

When a sensor is activated, the relevant component on the Fault Display is illuminated, the interior lights illuminate red and the Control Panel Display provides information on the fault.

The following is a summary of the sensor systems built into the M108S.

INDICATOR LIGHTS	FAULT
Blue Lid Light	All sensors cleared, ready to operate
White Lid Light	Live operating mode
Red Lid Light	Fault mode, check sensors

SENSOR	FAULT
Input Hopper	When not properly installed, machine remains in fault mode and will not start up.
Output Chute	When not properly installed, machine remains in fault mode and will not start up.
Separator	When not fully engaged, machine remains in fault mode and will not start up.
Lid	When not properly closed, machine remains in fault mode and will not start up.
E-Stop	When engaged, machine will not start up.