

Dear New WM3500 Customer,

We appreciate your business and confidence in Wood-Mizer Industrial Equipment for your sawing needs. We wanted to take a moment to provide you information in regard to your equipment purchase. [See page 4](#) for electrical and air system requirements.

Layout drawings showing equipment dimensions and setup are also included with this information.

Enclosed you will find:

- WM3500 Commissioning Information (page 2)
- Recommended Spare Parts List (page 3)
- Specifications (page 4)
 - WM3500 Thin-Kerf Headrig (page 4)
 - Incline Conveyor (page 5)
 - Transfer Deck (page 6)
 - 3/5-Way Deck (page 6)
 - Log Infeed Deck (page 7)
 - Modular Deck (page 8)
 - Twin Blade Portable Edger (page 9)
 - Industrial Edger (page 11)
- Optional Electrical Equipment (page 12)
 - Phase Converters (page 12)
 - Transformers (page 12)
 - Generators (page 12)

We hope this information is beneficial to you for starting up your industrial sawmill. Thank you for your business and we look forward to our partnership.

Sincerely,

Jim Brown
Customer Service Manager

JB/mle Form #1195

WM3500 Commissioning Information

Call Customer Service at 1-800-525-8100 to schedule your commission date. Press 1612 to reach our scheduler. If the scheduler is not available, press 0 to reach the operator. Please schedule your commission date at least two weeks in advance so we can accommodate your requested dates. Please allow three days for the commissioning service.

A forklift rated for at least **8,000 lbs.** is required for moving the Sawmill and Operator Station. **The forks must be able to fit inside the 5 1/2" x 3 1/2" fork pockets** and adjustable to 27" for the WM3500 and 21" for the Operator Station.

Please complete the following prior to commissioning:

1. Prepare site for each piece of equipment
2. Place each piece of equipment in proper location
3. Connect electrical power to main circuit breakers in control cabinet for the Sawmill and to the starter box for each piece of auxiliary equipment
4. Run air line to Sawmill and have ready to attach
5. Have logs readily available for Operator Training

An industrial representative will complete the following:

1. Anchor equipment to floor using included anchor bolts
2. Level the bed using the adjustable legs
3. Level the bed and head
4. Align the bed rails
5. Hookup hydraulics, lube, air and electrical lines from operator station to bed
6. Align blade guides
7. Align transducer
8. Adjust or install auxiliary industrial equipment for proper operation
9. Train operator

Recommended Spare Parts List

Wood-Mizer Spare Parts Pak

052163

Parts Kit, WM3500 w/ Steel Wheels

<i>Part Number</i>	<i>Description</i>	<i>Quantity</i>
012797	Bearing, Cam Follower 1 1/2 (McGill)	2
016309	Gauge, Belt Tensioner	1
017822	Bar, Dragback Lower, 1/2x1x11 3/4	2
023857	Bearing, MG305DDA	1
025041	Prox Sensor, 12mm UnShld Extd w/Conn	1
025200	Pot Assy, 4-20mA 24V W/conn	1
033479	Nozzle, Blade Lube Spray	2
036514	Shaft, Blade Guide Arm Motor	2
036636	Belt, Eagle PD, G2380	1
042245	Scaper, Brass	2
042367	Sprocket, P/F Idler	2
042399	Grease, Ballscrew Lube	4
042443	Chain, #25x92p	1
042655-2	Coupling Spider, Urethane, 10R	2
045175	Wiper Pad, Plastic	2
052309	Wear Pad, 1.5 Blade Guide	4
052736	Fuse, 17.5A 600V Class CC Delay	2
052757	Fuse, 10A 600V KLDLDR Class CC	2
052907	Fuse, 3.2A 600V Class CC	2
500561	Roller, TVS Blade Guide	2
F05012-53	Pin, 1/4x1 3/4 Roll	4
P09983	Link, 25 Master	1
P12165	Bushing, 11/16x2 1/8x1 3/4 Rubber	2
P20301	Filter, S28 Hyd	1

Specifications

WM3500 Thin-Kerf Headrig

Model: WM3500 Rev. B4.01+

Dimensions

Length (LT300 Frame): 26'- 2 15/16"
Length (with Operator Station & 10" between): 35'-9 1/32"
Width (Sawmill Only, Max Blade Guide Arm Position): 9'-5 3/4"
Width (Sawmill w/Right-Hand Cable Boom, Max Boom & Blade Guide Arm Position): 19'-6 11/16"
Width (Sawmill w/Left-Hand Cable Boom, Max Boom & Blade Guide Arm Position): 15'-9 1/4"
Height (Ground To Mast): 8'-6 1/4" to 9'-2 3/4" (Adjustable w/feet)
Height (Max Head Position): 9'-6 1/4" to 10'-2 3/4" (Adjustable w/feet)
Height (Cable Boom): 11'-1 9/16"
Bed Height (Ground To Bed): 30" to 38 1/2" (Adjustable w/feet)
Blade Length: 196"

Weights:

Basic Unit:
Saw Head Only:
Operator Station (No Cab/AC):
Cab Option:
A/C Option: 96 lbs.
BX6 Bed Extension

Cutting Capacity:

Length: 21'-6"
Length (with Board Removal): 20'-3"
Diameter: 40"
Weight: 4400 lbs.
Max. Clamp Width (from stop block): 26"
Min. Clamp Width (from stop block): 2"
Max. Throat Width (guide to guide): 34"
Max. Cant Width (outer guide to stop block): 31"
Max. Cutting Depth @ 24" wide: 5"
Max. Cutting Depth @ 22" wide: 13"

Blade Motor:

Manufacturer: Lincoln
Horsepower Rating: 30
RPM: 1725
Drive Shaft O.D.: 1 7/8"
Drive Belt (60/50 Hz): Eagle PD G2380
Blade Braking: 2.6 Seconds

Rates:

Normal Power Usage: 66 Amps, 35.90 kVa or 42.60 kWh
Max. Forward (Not Cutting): 170 ft./min.
Reverse: 300 ft./min.
Saw Head Up (24"): 7.45 sec.
Saw Head Down (24"): 6.58 sec.
Startup force required to raise saw head: 2175 lbs.
Clamp (full travel): 2.3 sec.
Log turner (turn 4200 lb. log 90°): 2.3 sec.

Options:

Operator Station Cab: CAB2
A/C for Cab: AC1

Electrical Requirements:

Electrical Service: 460V 3-Phase 100A
Fused Disconnect: 100A
Time Delay Fuse: 70A
Cab Option (No A/C): 110V 1-Phase 15A Service
Cab Option (w A/C): 110V 1-Phase 30A Service
Suggested Wire Size (50' max.): 4AWG

Air Requirements:

Shop Air Supply: 110 psi @16.5 cfm

Incline Conveyor

Model: IC2-H, IC2-L, IC2-S IC5-H, IC5-L & IC5-S Rev. A3.00+

Dimensions	IC2	IC5
	Length: 20'-3 3/16"	20'-3 5/16"
	Width: 3'-7 1/16"	3'-7 1/16"
	Height (Ground To Belt): 44 7/8"	44 7/8"
Weight:	Basic Unit:	
Capacity:	Board/Slab Length: 2' to 19'	
Motor:	IC2	IC5
	Manufacturer: Leeson	Leeson
	Horsepower Rating: 2	5
	RPM: 1725	1740
Rates:	Normal Power Usage: 2.5 Amps, 1.90 kVa or 1.50 kWh Belt Speed: 230 ft./min.	
Electrical Requirements:	Electrical Service (IC2/IC5-H): 460V 3-Phase 10A Electrical Service (IC2/IC5-L): 230V 3-Phase 20A Electrical Service (IC2/IC5-S): 230V 1-Phase 20A Suggested Wire Size (50' max.): 14AWG	

Model: IC2-H, IC2-L, IC2-S Rev. A2.00 - A2.02

Dimensions	IC2	IC5
	Length: 20'-2 13/16"	
	Width: 3'-6 3/8"	
	Height (Ground To Belt): 44 7/8"	
Weight:	Basic Unit:	
Capacity:	Board/Slab Length: 2' to 19'	
Motor:	IC2	IC5
	Manufacturer: Leeson	
	Horsepower Rating: 2	
	RPM: 1725	
Rates:	Normal Power Usage: 2.5 Amps, 1.90 kVa or 1.50 kWh Belt Speed: 230 ft./min.	
Electrical Requirements:	Electrical Service (IC2, IC2-1): 460V 3-Phase 10A Electrical Service (IC3): 230V 3-Phase 20A Electrical Service (IC4): 230V 1-Phase 20A Suggested Wire Size (50' max.): 14AWG	

Transfer Deck

Model: TD2 Rev. A1.00+

Dimensions

Length: 11'-1"
Width: 6'-5"
Height (Infeed Side): 44" (w/3" of adjustment)
Height (Offbear Side): 36" (w/3" of adjustment)

Weight:

Basic Unit: lbs.

Capacity:

Board/Slab Length: 6' to 17'

Electrical Requirements:

Electrical Service: 110V 1-Phase

Air Requirements:

Shop Air Supply: Regulated @ 60 psi

3/5-Way Deck

Model: TWC-1, TWC-2, TWC-EXT Rev. A1.00+

Dimensions:

Length (per table): 9'-1 3/4"
Width: 3'-6 3/4"
Height (Table Down): 2'-11 5/16" min. - 4'-2 5/16" max. (up to 15" leg adjustment)
Height (Table Up): 4'-6 3/16" min. - 5'-9 3/16" max. (up to 15" leg adjustment)
Height (Ground To Top of Roller): 2'-9 1/2" min. - 3'-11 1/2" max.

Weight:

Basic Unit: lbs.

Drive Motor:

2HP 230/460V 3 Phase

Capacity:

Per 9' table w/standard 2 air cylinders: 1000 lbs.
Per 9' table w/optional 3 air cylinders: 1400 lbs.

Electrical Requirements:

Electrical Service: 460V 30A 3 Phase
Fused Disconnect: 30A
Time Delay Fuse: 5A
Suggested Wire Size (50' max.): 16AWG

Air Requirements:

Shop Air Supply: Regulated @ 100 psi
1.44 cfm required per air cylinder (2 per table standard, 3 per table optional)
Minimum 50 gal. reserve tank and 3/4" supply line required.

Log Infeed Deck

Model: LD12/LD20 Rev. A2.00+

Dimensions

Length w/Loader Down (LD12): 16'-8"
Length w/Loader Down (LD20): 24'-4"
Width: 6'-0"
Height (LD12/LD20 w/Loader Up): 5'-5 3/16"
Height (LD12-1/LD20-1 w/Loader Up): 6'-1 11/32"
Height (LD12/LD20 ground to chain): 30"
Height (LD12-1/LD20-1 ground to chain): 38"
Distance between loading chains (center-to-center) 59"

Weight:

LD12: 1740 lbs.
LD12-1:
LD20: 2507 lbs.
LD20-1:

Capacity:

Log Length: 6' to ?
Number of 20" Dia. Logs (LD12): 6
Number of 20" Dia. Logs (LD20): 11

Model: LD12/LD20 Rev. A1.00 - A1.03

Dimensions

Length w/Loader Down (LD12): 16'-8"
Length w/Loader Down (LD20): 24'-4"
Width: 6'-0"
Height (w/Loader Up): 5'-5 3/16"
Height (ground to chain): 30"
Distance between loading chains (center-to-center) 59"

Weight:

LD12: 1740 lbs.
LD20: 2507 lbs.

Capacity:

Log Length: 6' to ?
Number of 20" Dia. Logs (LD12): 6
Number of 20" Dia. Logs (LD20): 11

Modular Deck

Model: 039520 Rev. A1.00+

Dimensions

Length (Base Unit Only): 8'-0 3/16" (Add 8' per extension module)
Width: 3'-7 5/8"
Height (Ground To Belt)*: 18-24", 23-29", 29-35", 35-42", 41-47" or 47-53"

Weight:

Base Unit: approx. 700 lbs.

Capacity:

Material Weight: 100 lbs./sq.ft. or 800 lbs. per 8' section
Material Length: 8' (Add 8' per extension module)

Motor:

Manufacturer: Leeson
Horsepower Rating: 2
RPM: 1725

Rates:

Normal Power Usage: 2.5 Amps, 1.90 kVa or 1.50 kWh
Belt Speed: 80, 107, 120, 180 or 241 feet/min.

Electrical Requirements:

Electrical Service (025293): 460V 3-Phase 10A
Electrical Service (050934): 230V 3-Phase 20A
Electrical Service (050999): 230V 3-Phase 20A
Suggested Wire Size (50' max.): 14AWG

*Height determined by leg assemblies supplied. Legs adjustable 6".

Twin Blade Portable Edger

Model: G28/E15/D21/D26 Rev. A5.00+

Dimensions

Length For Travel (Hitch to Lights): 13' 9"
 Length For Operation (with Outfeed Table): 20' 6"
 Width (Fender to Fender): 6' 4"
 Height (with Trailer): 4' 3"
 Bed Height (Ground to Bed): 31"
 Infeed Table Length: 6' 5"
 Outfeed table Length: 10'

Weight:	G28	E15	D21	D26
Basic Unit:		1870 lbs.		1850 lbs.

Trailer

Axle Capacity: 2500 lbs.
 Tire Capacity: 1870 lbs.
 Tire Size: ST205/75R

Capacity:

Max. Board Width: 24.75"
 Max. Cut: 15"
 Min. Cut: 3"
 Max. Board Thickness: 2 3/8"
 Min. Board Thickness: 1/4"
 Min. Board Length: 36"

Misc Specifications

Blade Diameter: 14"
 Blade Bore: 3"
 Blade Kerf (8 Tooth/18 Tooth): .150/.165

Engine/Motor:	G28	E15	D21	D26
Fuel/Energy:	Gas	3-Phase	Diesel	Diesel
Make:	Kohler	Baldor	Yanmar	Caterpillar
HP Rating:	28HP	15HP	21.9HP	26HP
RPM-Idle:		N/A		1900-2000
RPM-High (No load):		3450	3600	3000
Noise Level (Operator; not cutting/cutting; dBA):		82/101		
Noise Level (Puller; not cutting/cutting; dBA):		78/99		
Blade Speed (No load) RPM:				
Fuel Consumption (Gallon/Clock Hr.):		N/A		
Cooling:	Air	N/A	Water	Water
Engine Drive Shaft O.D. (inches):	1 1/8"	1 3/8"	1 1/8"	1 7/16"
Engine Drive Pulley:	3V4.75X3	3V4.75X3	3/5V44	3/5V49
Main Driven Pulley:	3V6.9X3	3V6.9X3	3/5V670	3/5V670
Drive Belts:	3/3VX900	3/3VX900	3/5VX850	3/5VX900
Gear Box Pulley:	3V450SH	3V450SH	3V450SH	3V450SH
Blade Shaft/Gear Box Pulley:	3V500SH	3V500SH	3V500SH	3V500SH
Charging System Output (Amp):		N/A	40	65
12V Battery (Cold Cranking Amps @ 32 F):	665	N/A	875	875
Oil Capacity w/Filter (qts.):		N/A	1.79	5.5

Rates:

Min. Feed Speed: 55 ft./min.
 Max. Feed Speed: 70 ft./min.

Electrical Requirements:	EE15 (high voltage)	EE15 (low voltage)	EE15-C (Canadian voltage)
Electrical Service:	380V-480V 3-Phase 100A	208V-240V 3-Phase	575V 3-Phase 100A
Fused Disconnect:	30A	60A	30A
Time Delay Fuse:	30A	60A	30A
Suggested Wire Size:	10AWG (50' max.)	6AWG (100' max.)	(50' max.)

Model: G25/G28E15/D22/D26 Rev. A3.00 - A4.03**Dimensions**

Length For Travel (Hitch to Lights): 13' 9"
 Length For Operation (with Outfeed Table): 20' 6"
 Width (Fender to Fender): 6' 4"
 Height (with Trailer): 4' 3"
 Bed Height (Ground to Bed): 31"
 Infeed Table Length: 6' 5"
 Outfeed table Length: 10'

Weight:	G25	G28	E15	D22	D26
Basic Unit:	2020 lbs.		2020 lbs	2200 lbs.	2000 lbs.

Trailer
Axle Capacity: 2500 lbs.
Tire Capacity: 1870 lbs.
Tire Size: ST205/75R

Capacity:
Max. Board Width: 24.75"
Max. Cut: 15"
Min. Cut: 3"
Max. Board Thickness: 2 3/8"
Min. Board Thickness: 1/4"
Min. Board Length: 36"

Misc Specifications
Blade Diameter: 14"
Blade Bore: 3"
Blade Kerf (8 Tooth/18 Tooth): .150/.165

Engine/Motor:	G25	G28	E15	D22	D26
Fuel/Energy:	Gas	Gas	3-Phase	Diesel	Diesel
Make:	Kohler	Kohler	Baldor	Kubota	Caterpillar
HP Rating:	25HP	28HP	15HP	22HP	26HP
RPM-Idle:	1800		N/A	1000	1900-2000
RPM-High (No load):	3600		3450	3000	3000
Noise Level (Operator; not cutting/cutting; dBA):	94/102		82/101		
Noise Level (Puller; not cutting/cutting; dBA):	90/98		78/99		
Blade Speed (No load) RPM:	3000				
Fuel Consumption (Gallon/Clock Hr.):	0.9		N/A		
Cooling:	Air	Air	N/A	Water	Water
Engine Drive Shaft O.D. (inches):	1 7/16"	1 1/8"	1 3/8"	1 7/16"	1 7/16"
Engine Drive Pulley:	3V4.75X3	3V4.75X3	3V4.75X3	3V5.6X3	3/5V49*
Main Driven Pulley:	3V6.9X3	3V6.9X3	3V6.9X3	3V6.9X3	3/5V670*
Drive Belts:	3/3VX900	3/3VX900	3/3VX900	3/3VX900	3/5VX900*
Gear Box Pulley:	3V450SH	3V450SH	3V450SH	3V450SH	3V450SH
Blade Shaft/Gear Box Pulley:	3V500SH	3V500SH	3V500SH	3V500SH	3V500SH
Charging System Output (Amp):	15		N/A	65	65
12V Battery (Cold Cranking Amps @ 32 F):	665	665	N/A	875	875
Oil Capacity w/Filter (qts.):	2.1		N/A	5.5	5.5

Rates:		
Min. Feed Speed: 55 ft./min.		*Drive pulleys/belts changed from 3/3 to 3/5 system Rev. A4.03
Max. Feed Speed: 70 ft./min.		(ED26 Only)

Electrical Requirements:	EE15 (high voltage)	EE15 (low voltage)	EE15-C (Canadian voltage)
Electrical Service:	380V-480V 3-Phase 100A	208V-240V 3-Phase	575V 3-Phase 100A
Fused Disconnect:	30A	60A	30A
Time Delay Fuse:	30A	60A	30A
Suggested Wire Size:	10AWG (50' max.)	6AWG (100' max.)	10AWG

Industrial Edger

Model: **E430/EG400 Rev. A1.00+**

Machine Dimensions:

Length: 148 1/2"
Width: 62 3/4"
Height: 81 3/4"
Infeed Table Height: 28" - 36" Adjustable
Infeed Table Length: 93 3/4"
Weight: 3750 lbs

Material Dimensions:

Maximum Feed Width: 36"
Maximum Board Width Cut: 28"
Minimum Board Width Cut: 3"
Maximum Board Thickness: 4"
Minimum Board Thickness: 1"

Electrical Installation Requirements:

380 - 415V 50Hz 3Ph: 100 Amp
460V 60Hz 3Ph: 100 Amp

Blade System:

Diameter: 16"
Bore: 3 1/2"
Teeth: 14
Kerf: 9/32"
Blade RPM (No Load): 2239
Width Adjustment Motor Horsepower: 1/2
Width Adjustment Motor RPM: 1725

Feed System:

Minimum Feed Speed (4" material): 44 Ft/Min
Medium Feed Speed (2" material): 78 Ft/Min
Maximum Feed Speed (1" material): 111 Ft/Min
Feed Motor Horsepower: 2
Feed Motor RPM: 1725

Blade Motor:

Horsepower: 30
RPM (No Load): 1765
Motor Shaft Diameter: 1 7/8"
Motor Pulley Diameter: 8 1/2"
Drive Pulley Diameter: 6.7"
Drive Belt: 35VX900

Optional Electrical Equipment

Phase Converters

Description	Manufacturer	Mfg. Part No.
230VAC RotoPhase Converter	ARCO	RP-300230
230VAC RotoPhase Converter w/Magnetic Starter Package	ARCO	RP-300230WS
460VAC RotoPhase Converter	ARCO	RP-300460
460VAC RotoPhase Converter w/Magnetic Starter Package	ARCO	RP-300460WS

NOTE: Wood-Mizer has developed phase converter requirements with ARCO. We highly recommend you consult with Tim Drake of ARCO at (800) 428-4370 to determine your specific needs. Once determined, converters may be ordered through Wood-Mizer. Generic phase converters must provide 2% or less phase differential. If differential is higher, reactors may be used to correct (part #051574).

Transformers

Description	Manufacturer	Mfg. Part No.
220V Delta to 480V Delta 3-Phase 60Hz 75kVA	Cutler-Hammer	V25M48T75A
575V to 460V 3-Phase 63kVA	Square D	63T147HDIT
380V Delta to 480V Delta 3-Phase 50Hz 75kVA	Cutler-Hammer	SIMV48M24T75G -380pri-50hz*

* Special Order. Allow 4-6 weeks for delivery.

Generators

To calculate the generator required, total the horsepower ratings of all machines. Use 90HP for WM3500 and options. Use 40HP for the Industrial Edger. Multiply the total horsepower by 746 to determine watts. Divide watts by 1000 to determine kVA. Use a safety factor of 2 (kVA x 2) to determine the size of generator required.

Example - Determine generator requirement for WM3500 and Industrial Edger:

$$\text{Total HP (90 + 40) = 130}$$

$$\text{Watts (130 x 746) = 96980}$$

$$\text{KvA (96980/1000) = 97}$$

$$\text{Generator KvA required (97 x 2 safety factor) = 194 Kva}$$