

Log Deck

Safety, Operation and Maintenance Manual

LD1-12L
LD1-20L

rev.A9.00
rev.A9.00



Safety is our #1 concern! Read and understand all safety information and instructions before operating, setting up and/or maintaining this equipment.

Form #1013

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SECTION 1 SAFETY INSTRUCTIONS

1.1 Safety Symbols

The following symbols and signal words call your attention to instructions concerning your personal safety. Be sure to observe and follow these instructions.



The word **DANGER** indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



WARNING! suggests a potentially hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION refers to potentially hazardous situations which, if not avoided, may result in minor or moderate injury to persons or equipment.



IMPORTANT! indicates vital information.

NOTE: gives helpful information.



Warning stripes are placed on areas where a single decal would be insufficient. To avoid serious injury, keep out of the path of any equipment marked with warning stripes.

1 SAFETY INSTRUCTIONS

Safety Instructions

1.2 Safety Instructions

NOTE: ONLY safety instructions regarding personal injury are listed in this section. Caution statements regarding only equipment damage appear where applicable throughout the manual.

Observe Safety Instructions



IMPORTANT! Read the entire Operator's Manual before operating the unit. Take notice of all safety warnings throughout this manual and those posted on the equipment. Keep this manual with this equipment at all times, regardless of ownership.

Also read any additional manufacturer's manuals and observe any applicable safety instructions including dangers, warnings, and cautions.

Only persons who have read and understood the entire operator's manual should operate this equipment. The equipment is not intended for use by or around children.



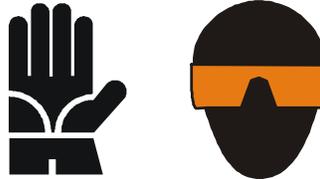
IMPORTANT! It is always the owner's responsibility to comply with all applicable federal, state and local laws, rules and regulations regarding the ownership, operation and towing of your Wood-Mizer equipment.



Wear Safety Clothing



WARNING! Secure all loose clothing and jewelry before operating this equipment. Failure to do so may result in serious injury or death.



WARNING! Always wear eye, ear, respiration and foot protection as well as safety clothing when operating or servicing the equipment.



Keep the Equipment and Area Around Clean



DANGER! Maintain a clean and clear path for all necessary movement around the equipment and lumber stacking areas. Failure to do so may result in serious injury.

Dispose Of Sawing By-Products Properly



IMPORTANT! Always properly dispose of all sawing by-products, including sawdust and other debris.

Check the Equipment Before Operation

DANGER! Make sure all guards and covers are in place and secured before operating the equipment. Failure to do so may result in serious injury.

***Keep Persons Away***

DANGER! Keep all persons out of the path of moving equipment and lumber when operating the equipment. Failure to do so may result in serious injury.



DANGER! Be sure that all persons are away from the equipment before starting it. Failure to do so may result in serious injury.

Keep Hands Away

 **DANGER!** Always keep hands away from moving chain. Failure to do so may result in serious injury.

 **DANGER!** Always be aware of and take proper protective measures against rotating shafts, pulleys, fans, etc. Always stay a safe distance from rotating members and make sure that loose clothing or long hair does not engage rotating members resulting in possible injury.



Use Proper Maintenance Procedures

 **DANGER!** Make sure all electrical installation, service and/or maintenance work is performed by a qualified electrician and is in accordance with applicable electrical codes.

 **DANGER!** Hazardous voltage inside the electric box and at the motor can cause shock, burns, or death. Disconnect and lock out power supply before servicing! Keep all electrical component covers closed and securely fastened during equipment operation.



1

SAFETY INSTRUCTIONS

Keep Safety Labels In Good Condition



WARNING! Consider all electrical circuits energized and dangerous.



WARNING! Disconnect and lock out power supply before servicing! Failure to do so may result in serious injury.



WARNING! Never assume or take the word of another person that the power is off; check it out and lock it out.



WARNING! Do not wear rings, watches, or other jewelry while working around an open electrical circuit.



CAUTION! The conveyor's work-stand should be equipped with a 4 kg or bigger dry powder extinguisher.

Keep Safety Labels In Good Condition



IMPORTANT! Always be sure that all safety decals are clean and readable. Replace all damaged safety decals to prevent personal injury or damage to the equipment. Contact your local distributor, or call your Customer Service Representative to order more decals.

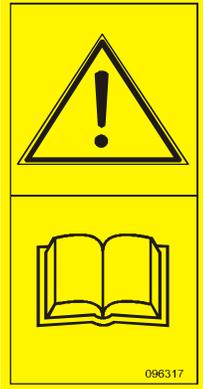


IMPORTANT! If replacing a component which has a safety decal affixed to it, make sure the new component also has the safety decal affixed.

Safety Labels Description

See Table 1-1. Pictographic safety labels are shown in the table below.

TABLE 1-1

Decal View	Decal No.	Description
	096317	Read thoroughly the operator's manual before operating the equipment. Observe instructions and safety rules when operating.
	099220	Close all guards and covers prior to starting the equipment.
	099221	Keep all persons a safe distance away from work area when operating the unit.

1 SAFETY INSTRUCTIONS

Safety Labels Description

TABLE 1-1

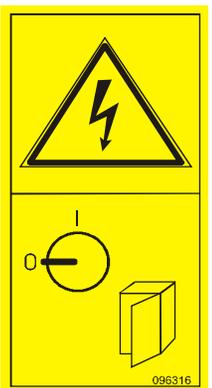
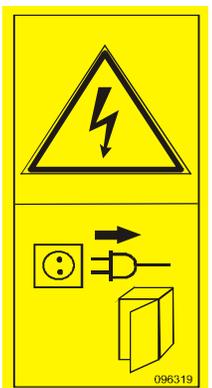
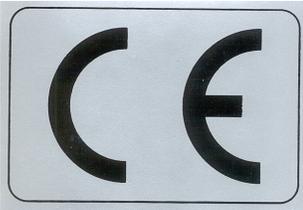
 <p>096314</p>	<p>096314</p>	<p>Keep all persons a safe distance away from work area when operating the unit.</p>
 <p>096316</p>	<p>096316</p>	<p>Do not open or close the electric box when the switch is not in the "0" position.</p>
 <p>096319</p>	<p>096319</p>	<p>Disconnect power supply before opening the box.</p>

TABLE 1-1

	<p>098177</p>	<p>Disconnect power supply before servicing.</p>
	<p>099540</p>	<p>CAUTION! Gear danger – keep a safe distance away!</p>
	<p>S12004G</p>	<p>Always wear safety goggles when operating the equipment.</p>

1 SAFETY INSTRUCTIONS
Safety Labels Description

TABLE 1-1

	<p>S12005G</p>	<p>Always wear protective ear muffs when operating the equipment.</p>
	<p>P85070</p>	<p>CE safety certification</p>
	<p>099780</p>	<p>Caution! Slabs falling off the deck!</p>

SECTION 2 OPERATION

2.1 Log Deck Components

 **WARNING!** Always stay a safe distance from moving equipment and logs when operating the Log Deck. Failure to do so may result in serious injury or death.

See **Figure 2-1**. The major components of the Log Deck are identified below.

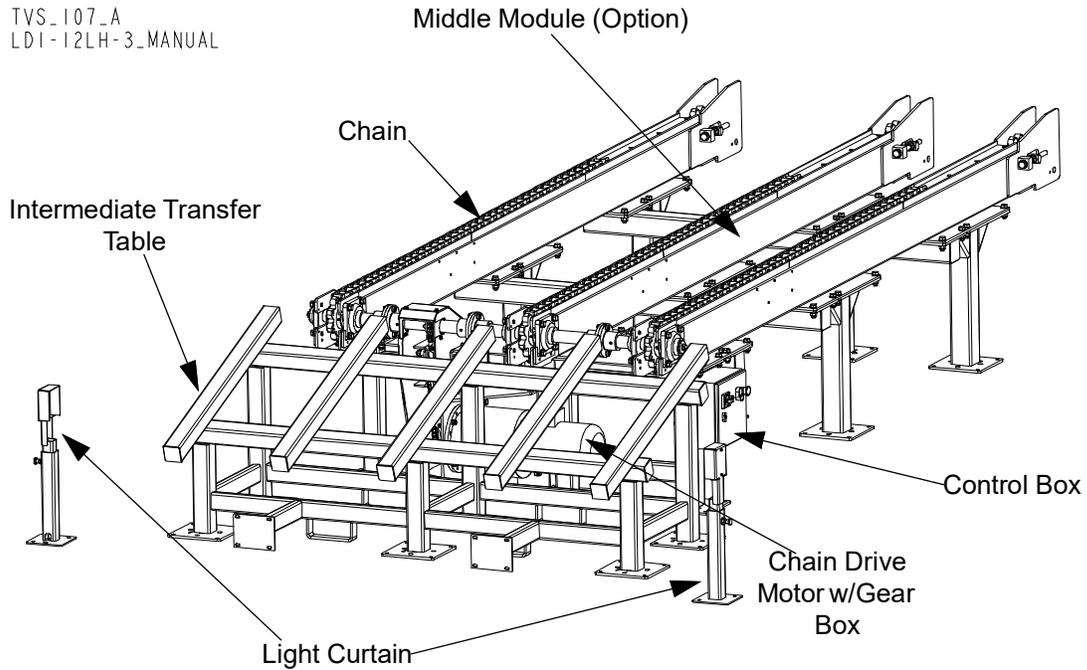


FIG. 2-1 LOG DECK

2 Operation

Log Deck Components

 **CAUTION!** Never drop logs onto the log deck from a height more than 6" (15 cm) when loading. Failure to do so may result in damage to the log deck.

See Figure 2-2. The correct way to load logs is shown below.

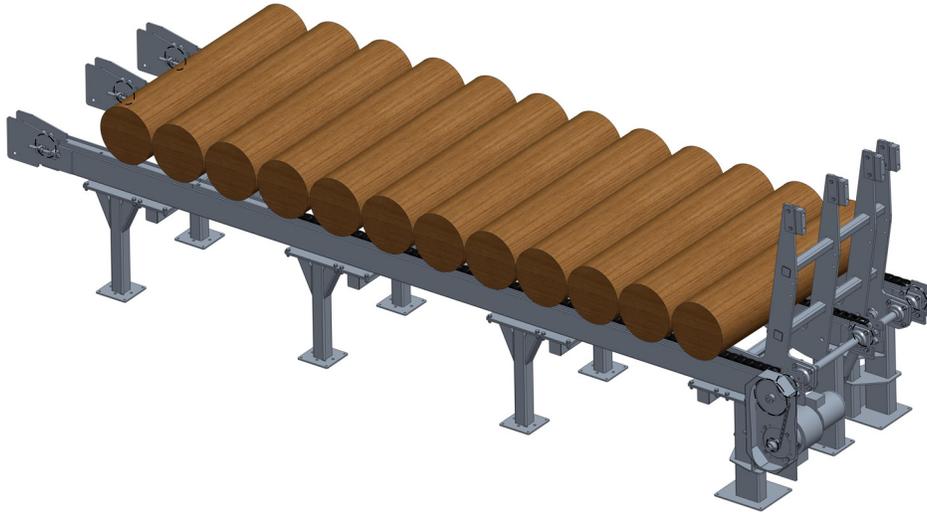


FIG. 2-2 CORRECT WAY TO LOAD LOGS

See Figure 2-3. The incorrect way to load logs that can result in damage to the log deck is shown below.

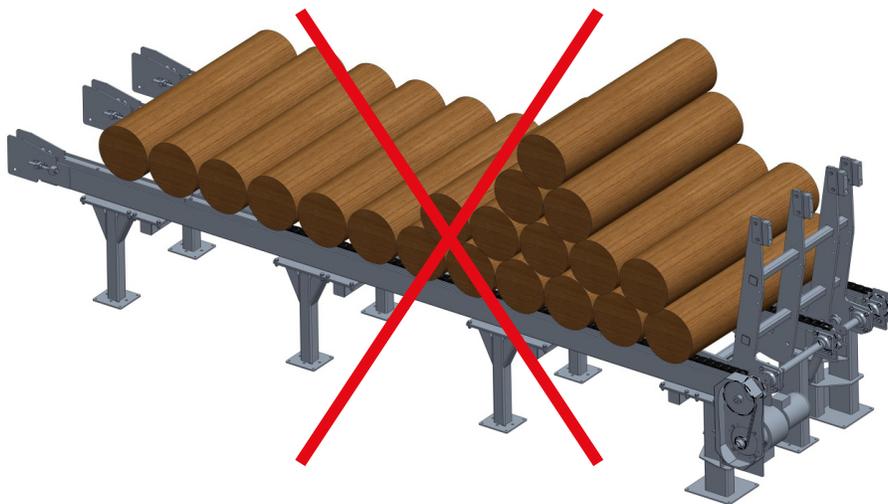


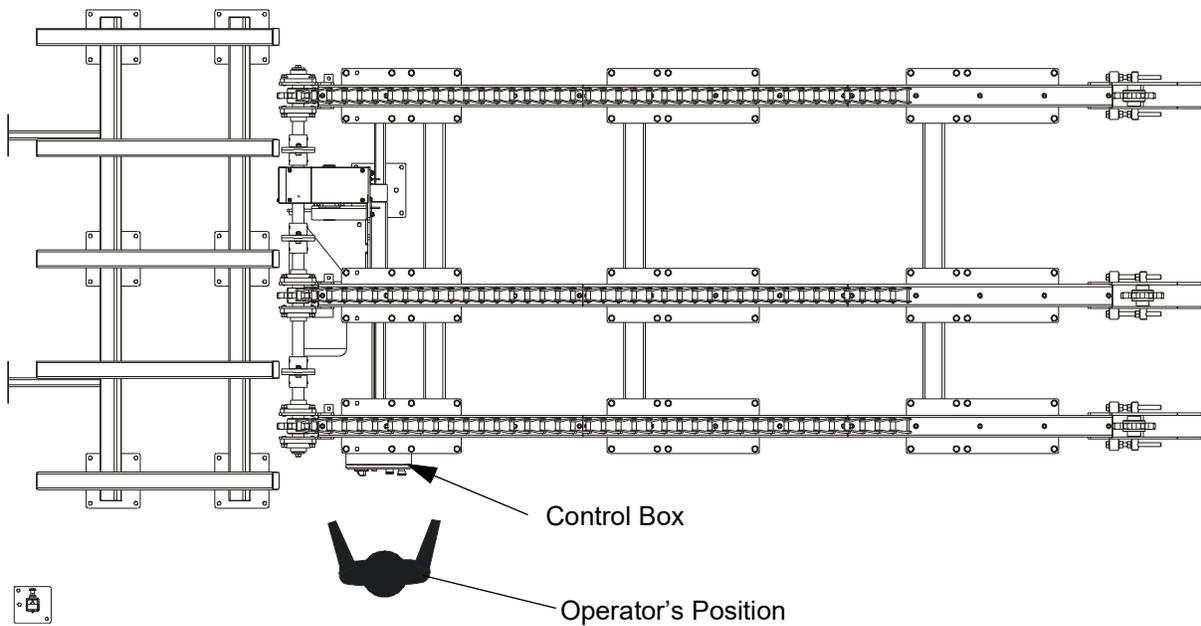
FIG. 2-3 INCORRECT WAY TO LOAD LOGS

2.2 Log Deck Setup



IMPORTANT! Before starting to use the Log Deck you have to meet the following conditions.

- Set up the deck on firm and level ground. Fasten the unit to the ground.
- The Log Deck can be operated in temperature range from -20° C to 40° C only.
- The operator's position is shown in the figure below.
- Setup and connect the light curtain posts according to figure 4-1 and electric diagram.



- Have a qualified electrician install the power supply (according to EN 60204 Standard). The power supply must meet the specifications given in the table

2 Operation

Log Deck Operation

below.

3-Phase Volts	Fuse Disconnect	Recommended Wire Size
400 VAC	4 Amp	1.5 mm ²

TABLE 2-1



IMPORTANT! When starting the unit for the first time, check that the chain rotation direction is correct. If it is incorrect, invert the phases in the phase inverter located in the power socket (in the electric box).



IMPORTANT! When starting the equipment for the first time, let it run for the first 1-2 hours without load.

2.3 Log Deck Operation

To start or stop the Log Deck, use the START/STOP switch located on the control box.

In case of any danger to persons or equipment, push the emergency stop button. This stops the Log Deck. To release the stop, turn the emergency stop button clockwise.

The deck will not restart until the emergency stop is released.

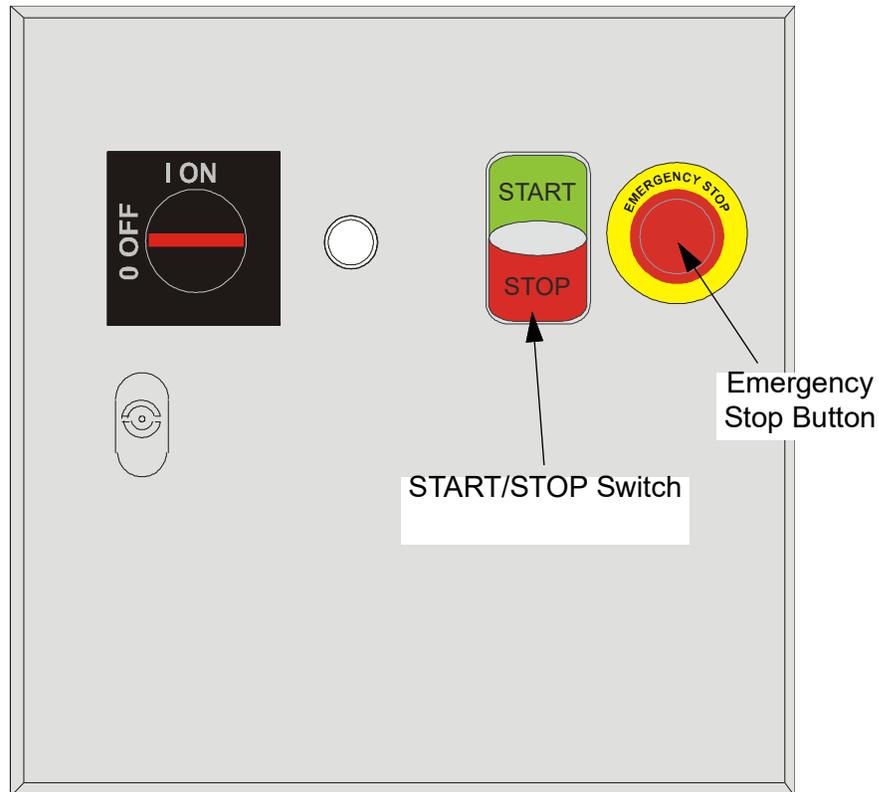


FIG. 2-1

 **CAUTION!** If at any time you need to immediately stop the chain drive motor, press the emergency stop button located on the electric box.

After engaging the Log Deck chain, the logs placed on the deck are fed onto the Incline Log Deck .

 **CAUTION!** If the log to be cut is short, place it on the middle module beam and on the beam located at the control box. Failure to do so may result in serious injury. A Log of at least 700mm length can be transferred on the Log Deck.

 **CAUTION!** If the Log Deck is not equipped with the middle module, the minimum length of a log that can be transferred on the deck is 1600 mm.

 **WARNING!** Before operating the Log Deck, fasten its legs

2

Operation

Log Deck Operation

to the ground. Failure to do so may result in serious injury or death.



CAUTION! Never load logs on the Log Deck from a height of above 20cm. Damage to the deck may result.

SECTION 3 MAINTENANCE

This section lists the maintenance procedures that need to be performed.



This symbol indicates the interval (hours of operation) at which each maintenance procedure should be performed.

3.1 Lubrication



CAUTION! Never apply grease to the transfer chain. It causes sawdust buildup in chain links.



1. Using the grease fittings, lubricate the drive shaft bearings every 50 hours of operation.

See Figure 3-1.

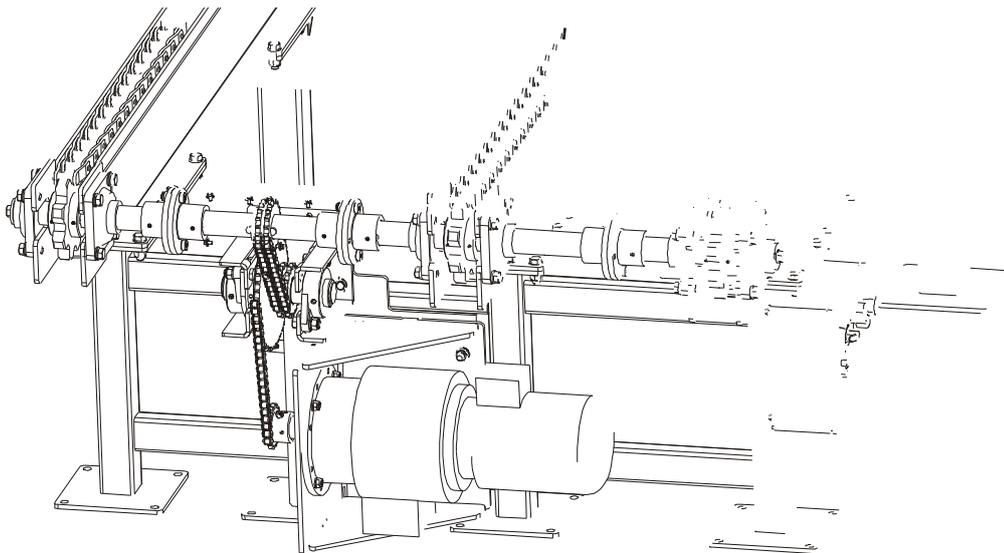


FIG. 3-1

2. Make sure all safety decals are readable. Remove sawdust and dirt. Replace any damaged or unreadable decals immediately. Order decals from your Wood-Mizer Customer Service Representative.

3.2 Transfer Chain Tension



CAUTION! Do not overtension the chains of TVS, log decks and transfer decks. Overtensioning may lead to premature failure of the gears, the bearings, the rollers and the chains.

See Figure 3-2. Use the adjustment bolts shown below to adjust the transfer chain tension.

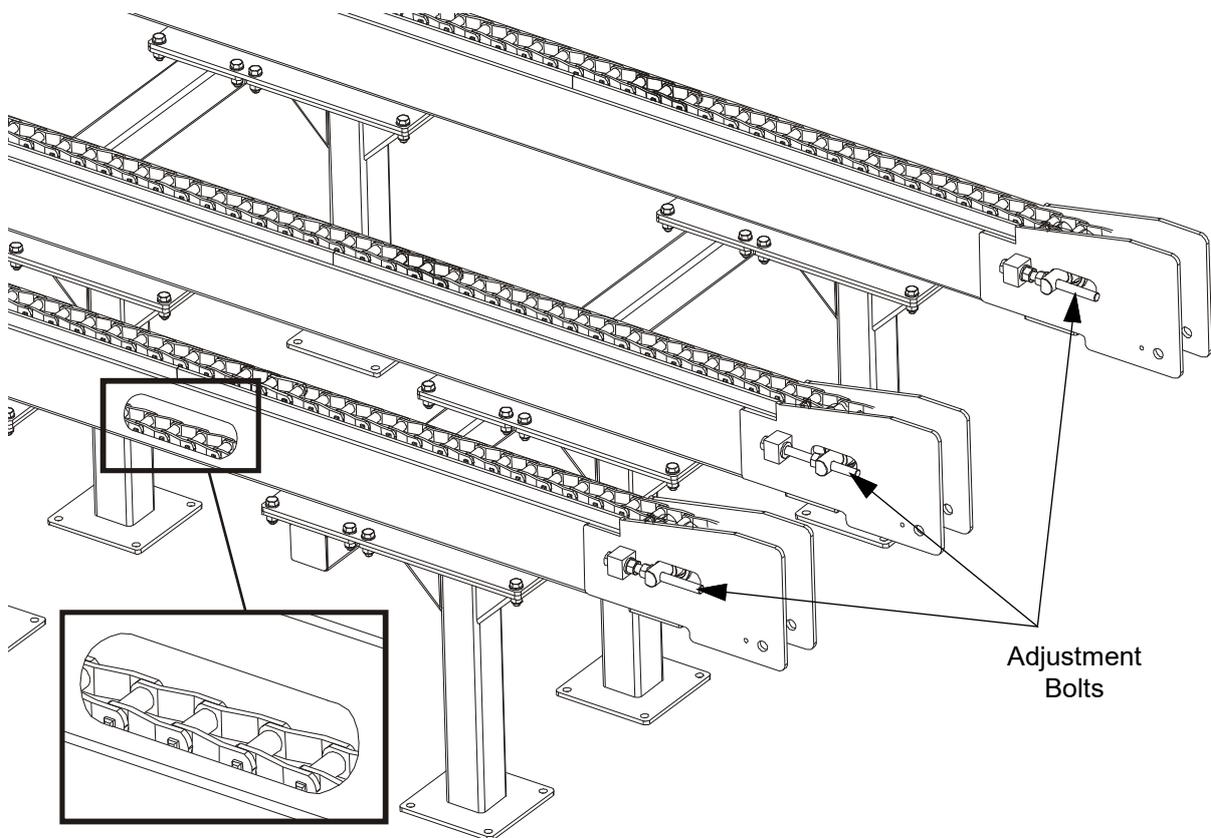


FIG. 3-2



CAUTION! The part of the transfer chain located inside the frame tube should not rub against the bottom of the tube.

3.3 Drive Chain Tension

Check tensions of the drive chains every 40 hours of operation and adjust as necessary. The chains should have approximately 1,5 cm of slack.

See Figure 3-3. Loosen the mounting bolts and move the motor along with the mounting plate in the direction indicated by the arrows.

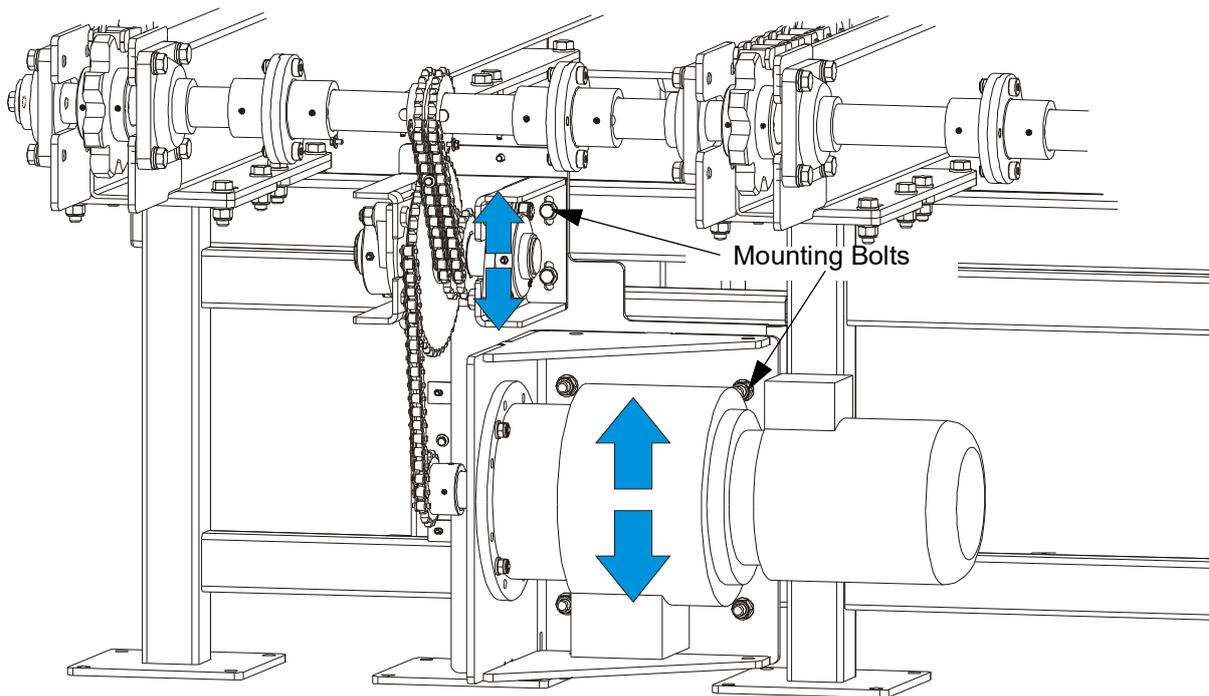


FIG. 3-3

SECTION 4 SPECIFICATIONS

4.1 Log Deck Dimensions

See **Figure 4-1**. The overall dimensions of the LD1-12L Log Deck are shown below (all dimensions are in millimeters).

TVS_113_A
LDI-12LH-3_MANUAL

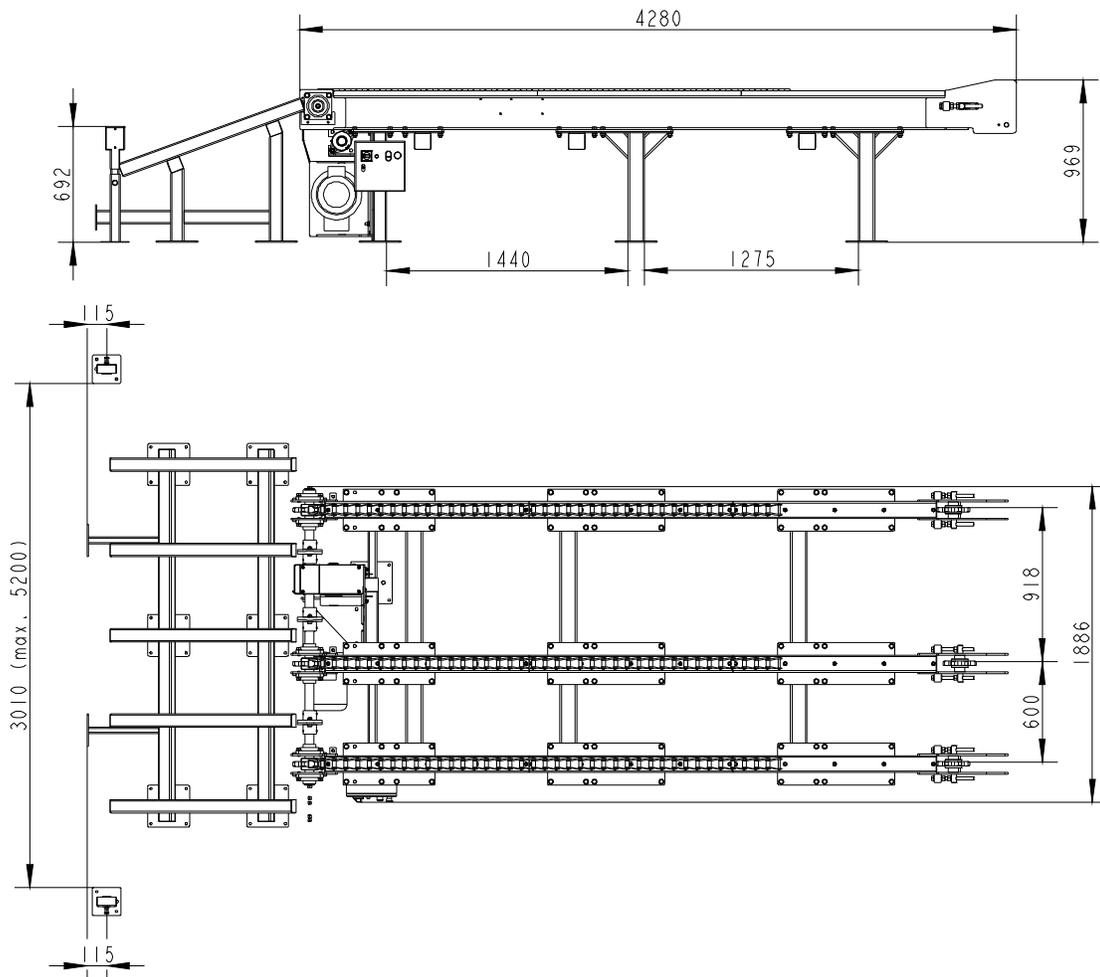


FIG. 4-1 LD1-12L

See **Figure 4-2**. The overall dimensions of the LD1-20L Log Deck are shown below (all dimensions are in millimeters).

TVS_114_A
LDI-20LH-3_MANUAL

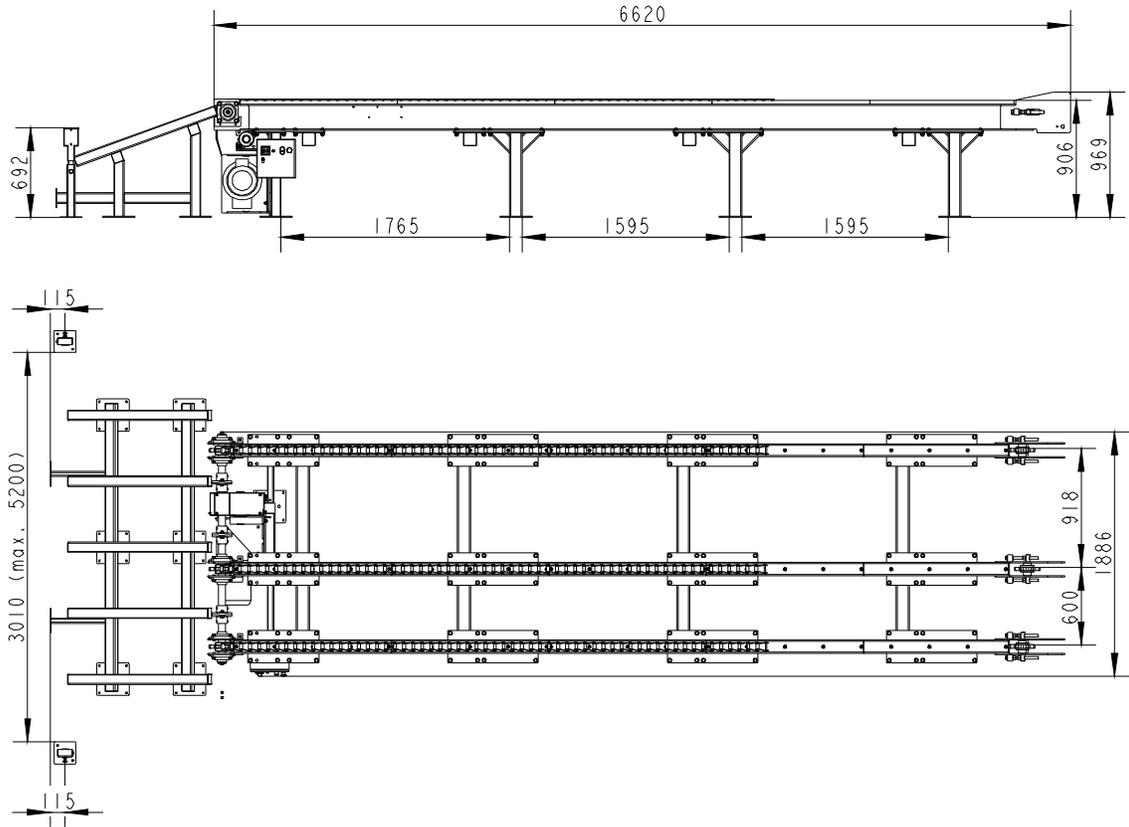


FIG. 4-2 LD1-20L

4 SPECIFICATIONS

Motor Specifications

See Figure 4-3. The figure below shows anchor locations of the Log Deck feet.

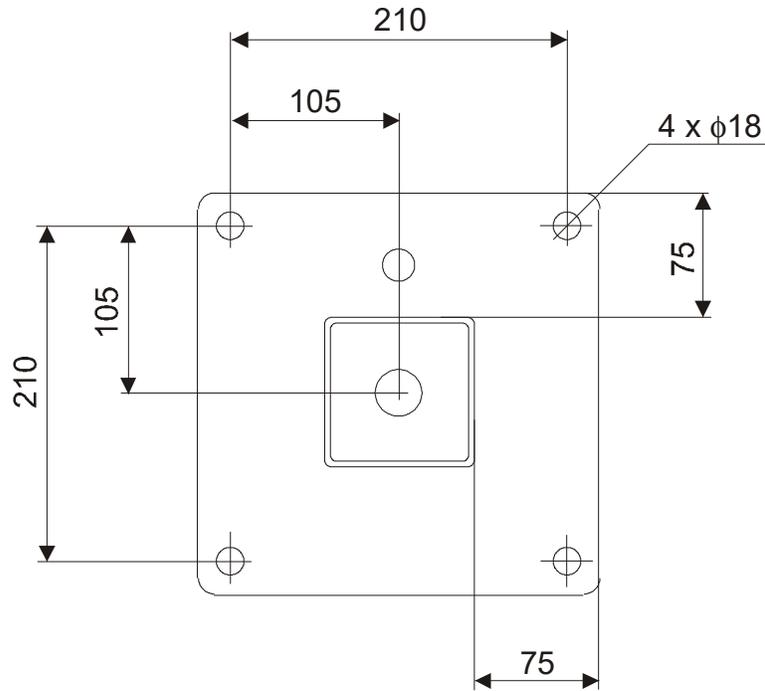


FIG. 4-3

See Table 4-1. See the table below for the weight of your Log Deck.

Type	Weight
LD1-12L	1100 kg
LD1-20L	1300 kg

TABLE 4-1

4.2 Motor Specifications

See Table 4-2. The specifications of the Log Deck motor are listed below.

Motor Type	Manufacturer	Power	Other Data
AG-AL112-4M	AG MOTORS	4 kW	1430 r.p.m. 3x230/400V, 50Hz

TABLE 4-2

4.3 Electrical Diagram

See Figure 4-4. Log Deck electrical diagram is shown below.

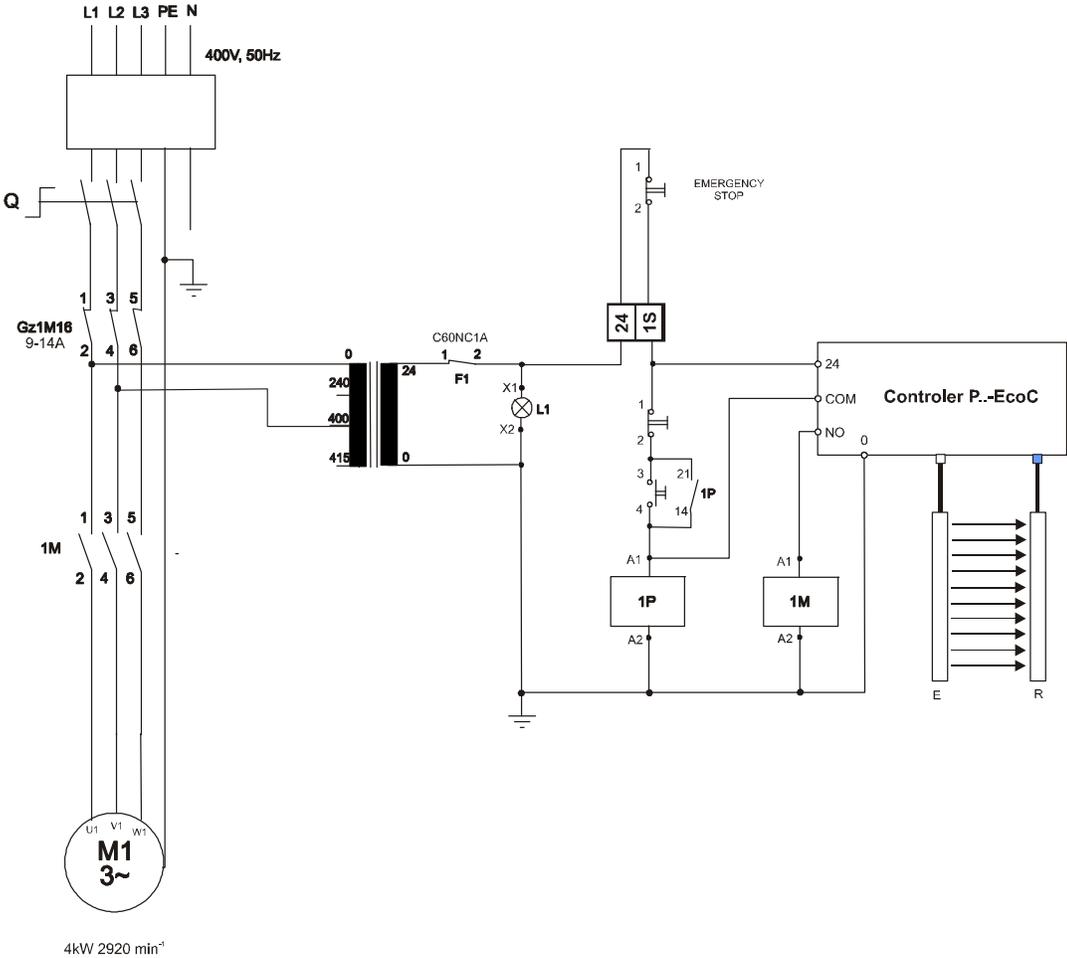


FIG. 4-4

4.4 Electrical Components

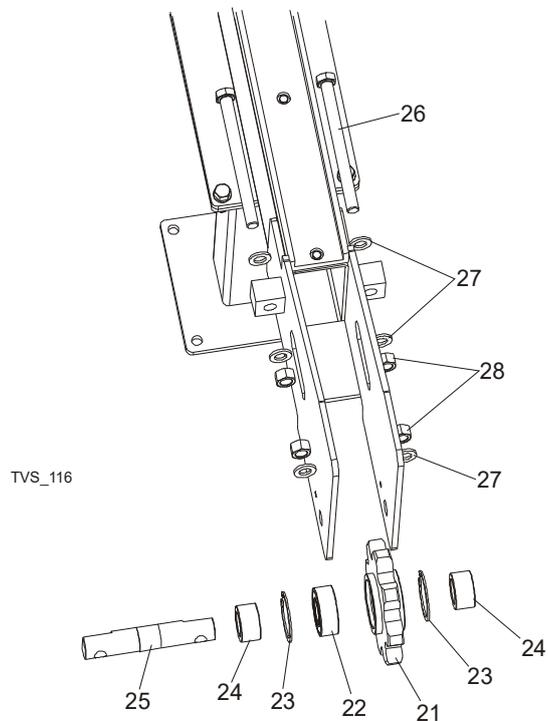
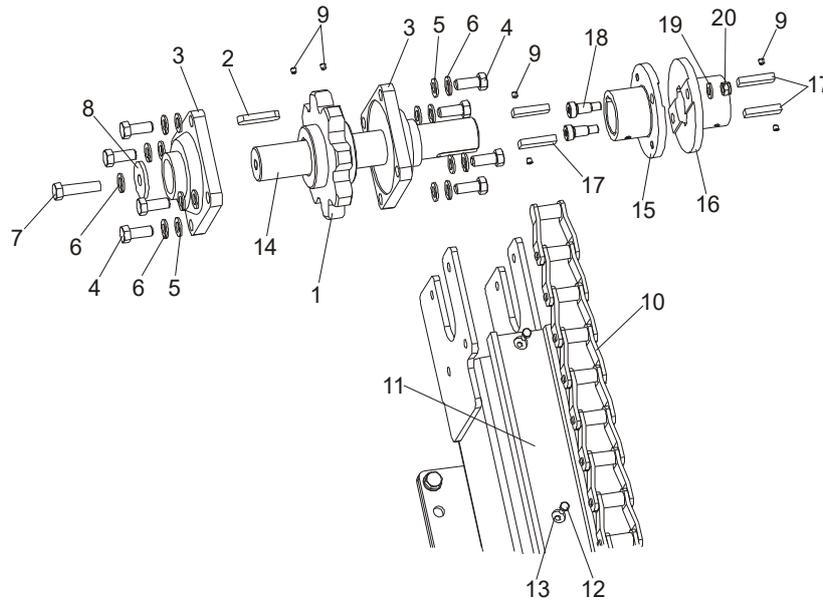
See Table 4-3. The Log Deck electrical components are listed below.

Symbol	Wood-Mizer Part No.	Description
Q	089801	Switch, ABB OT16E3
1M	084451	Contactor, LC1K12B7
Gz	084454	Switch, C60N 1P C1
L1	090448	Control Lamp, White M22

TABLE 4-3

SECTION 5 LOG DECK PARTS

5.1 Chain Guide Assembly

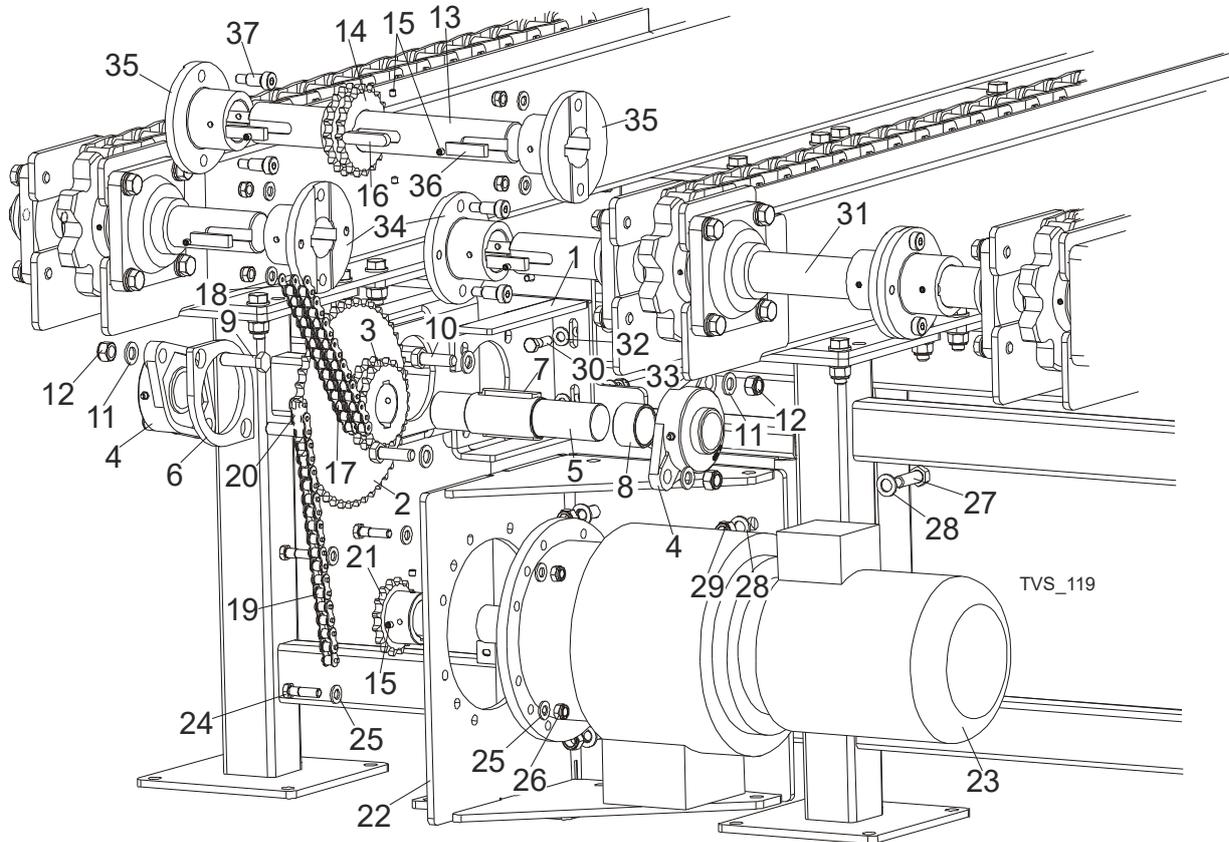


TVS_116

REF.	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY
1	SPROCKET, Z8 OXIDIZED	089888-1	1
2	KEY, A16X10X70 PARALLEL	098029	1
3	BEARING, UCF 211 W/HOUSING (FOR 55 DIA. SHAFT)	089889	2

4	BOLT, M16X40-8.8 HEX HEAD FULL THREAD ZINC	F81006-13	8	
5	WASHER, 17 FLAT ZINC	F81058-1	8	
6	WASHER, 16.3 SPLIT LOCK ZINC	F81058-2	8	
7	BOLT, M16X65-8.8-B HEX HEAD FULL THREAD ZINC	F81006-1	1	
8	WASHER, SPECIAL	098012-1	1	
9	SCREW, M8X8 45H GEOMET HEX SOCKET SET FLAT POINT	F81014-1	6	
10	CHAIN, LOG DECK 8290MM 125 LINKS (LD1-12L)	504581	1	
	CHAIN, LOG DECK 12930MM 195 LINKS (LD1-20L)	504583	1	
11	CHANNEL, UHMW CONVEYOR	033722	3	
12	BOLT, M8X20-5.8 HEX HEAD FULL THREAD ZINC	F81002-1	15	
13	WASHER, 6.5 SPECIAL FLAT ZINC	F81053-11	15	
14	SHAFT, SLPLD END PART	099233	1	
15	BUSHING, FLANGED W/LOCK	099232-1	1	
16	BUSHING, FLANGED	099236-1	1	
17	KEY, A16X10X60 PARALLEL	099238	4	
18	BOLT, 16/M12X25 12.9 ISO 7379 SHOULDER	F81004-56	2	
19	WASHER, 13 FLAT ZINC	F81056-1	2	
20	NUT, M12-8 HEX NYLON ZINC LOCK	F81034-2	2	
21	SPROCKET, Z8 REAR OXIDIZED	089919-1	1	
22	BEARING, 3208B.2RSR.TVH FAG	088449	1	
23	RING, W80 INSIDE RETAINING	F81090-25	2	
24	BUSHING, SPROCKET ZINC-PLATED SPACER	089916-1	2	
25	AXLE, CHAIN TENSION SPROCKET ZINC-PLATED	089915-1	1	
26	BOLT, M20X240-8.8 HEX HEAD FULL THREAD ZINC	F81007-1	2	
27	WASHER, 21 FLAT ZINC	F81059-2	6	
28	NUT, M20-8 HEX ZINC	F81037-1	4	

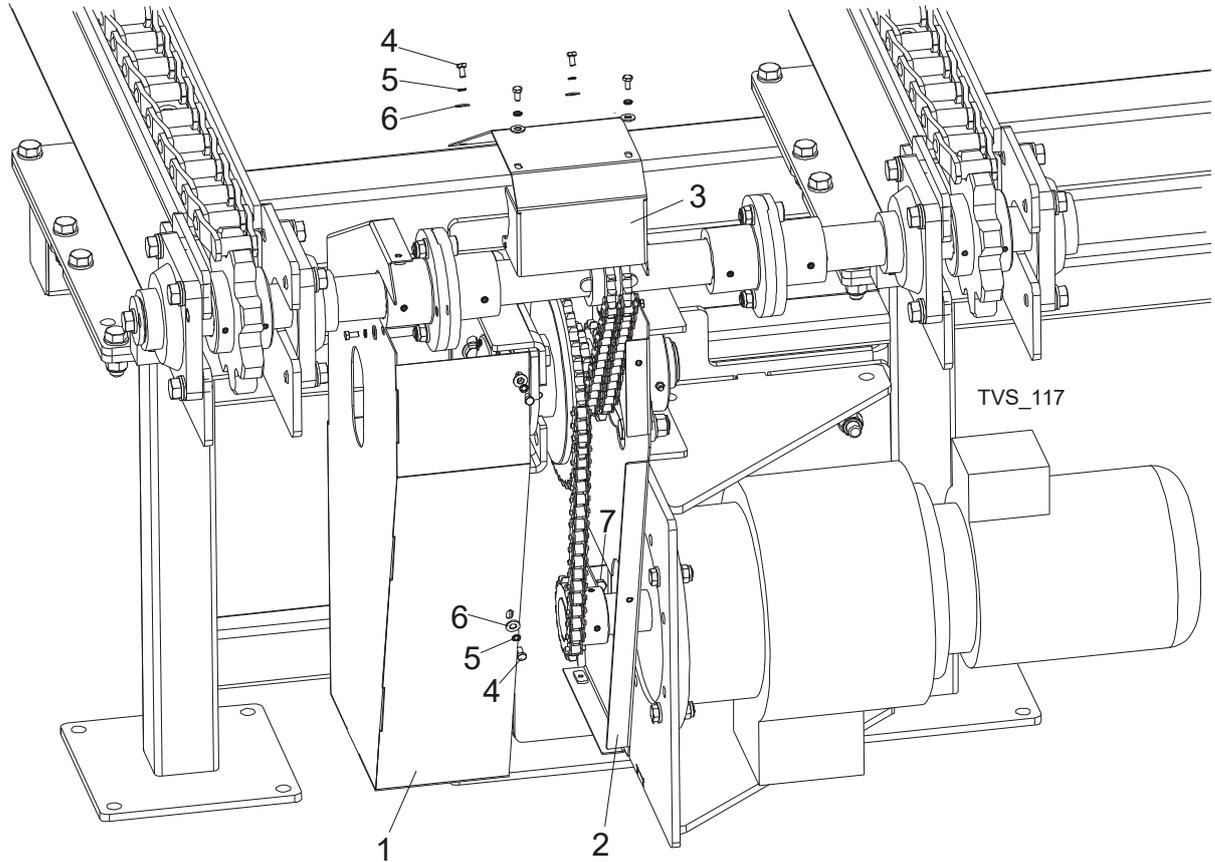
5.2 Drive Assembly



REF.	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY
	SPROCKET ASSEMBLY, TVS SLPLD	098424	1
1	BRACKET WELDMENT, SPROCKET MOUNT	098422-1	1
2	SPROCKET, 12B Z45 OXIDIZED	089894-1	1
3	SPROCKET, 12B Z19	098013-1	1
4	BEARING, UCFL 210 CX W/HOUSING	098824	2
5	SHAFT, TVS INTERMEDIATE SPROCKET ZINC-PLATED	098419-1	1
6	PLATE, FL 210 BEARING HOUSING SPACER	099106-1	1
7	KEY, A16X10X90 PARALLEL	099131	2
8	RING, TVS SPROCKET SPACER	098011-1	1
9	BOLT, M16 LOW HEAD	099647	2
10	BOLT, M16x50-8.8 HEX HEAD FULL THREAD ZINC	F81006-7	2
11	WASHER, 17 FLAT ZINC	F81058-1	8
12	NUT, M16-8 HEX NYLON ZINC LOCK	F81036-2	4
13	SHAFT, SLPLD MAIN	099235	1
14	SPROCKET, 12B Z19	098013-1	1
15	SCREW, M8x8-33H HEX SOCKET SET FLAT POINT ZINC	F81014-1	12
16	KEY, A16X10X70 PARALLEL	098029	2
17	CHAIN	100187	1
18	LINK, 12B-2PZ	099249	1

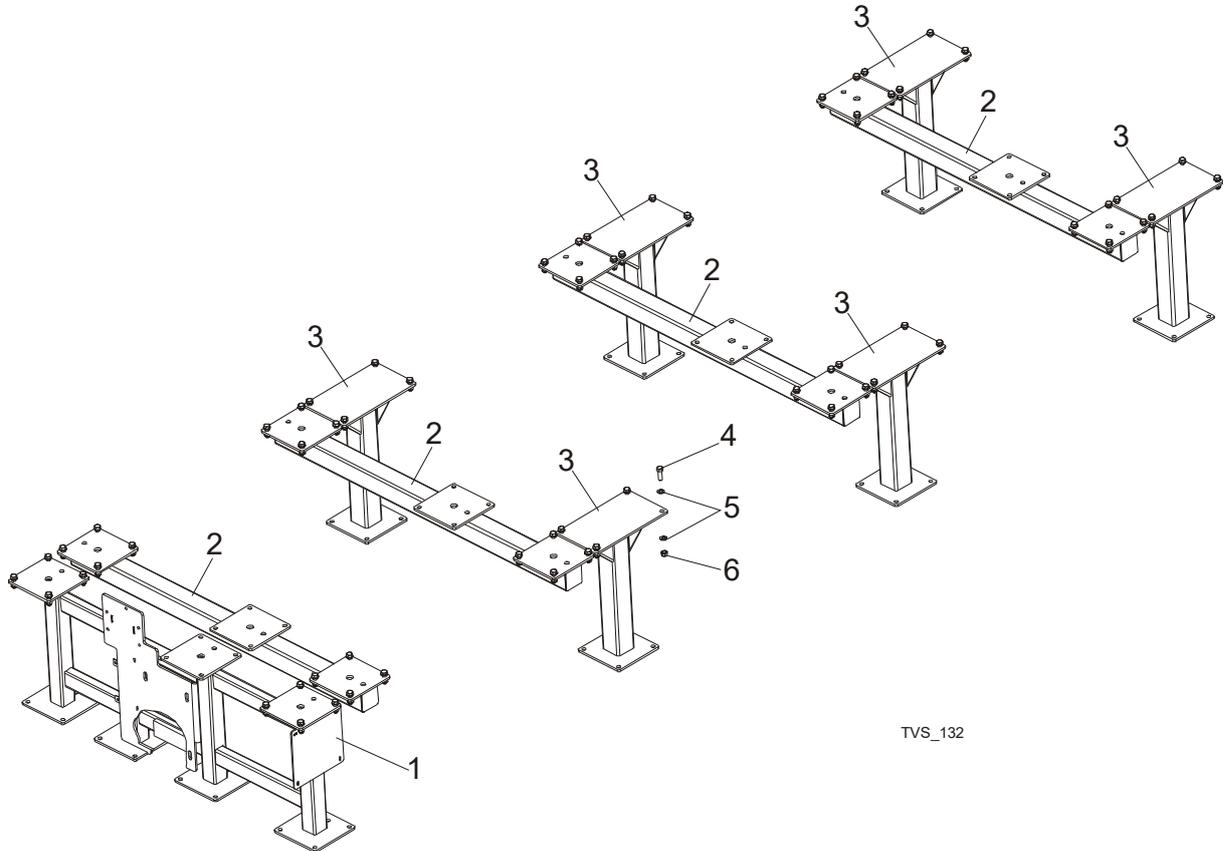
19	CHAIN, 12B-1-65 (1.25 R.M.)	099248	1	
20	LINK, 12B-1PZ	090713	1	
21	SPROCKET, 12B Z16 OXIDIZED	090303-1	1	
22	BRACKET, LOG DECK MOTOR MOUNT	089897-1	1	
23	MOTOREDUCER, SXHCM502F/112M-4/34D.300	089892	1	
	MOTOR SKg 112M-4- IE1 (S3-75%)	084143	1	
	REDUCER SXHC502FB 42,75-250/28	084553	1	
24	BOLT, M12x45-8.8 HEX HEAD ZINC	F81004-32	4	
25	WASHER, 13 FLAT ZINC	F81056-1	8	
26	NUT, M12-8 HEX NYLON ZINC LOCK	F81034-2	4	
27	BOLT, M16x50-8.8 HEX HEAD FULL THREAD ZINC	F81006-7	4	
28	WASHER, 17 FLAT ZINC	F81058-1	8	
29	NUT, M16-8 HEX NYLON ZINC LOCK	F81036-2	4	
30	BOLT, M12X40-8.8 HEX HEAD ZINC	F81004-1	2	
31	SHAFT, SLPLD MIDDLE PART	099237	1	
32	WASHER, 13 FLAT ZINC	F81056-1	14	
33	NUT, M12-8-B HEX ZINC	F81034-1	10	
34	BUSHING, FLANGED W/LOCK	099232-1	3	
35	BUSHING, FLANGED	099236-1	3	
36	KEY, A16X10X60 PARALLEL	099238	12	
37	BOLT, 16/M12X25 12.9 ISO 7379(BOSSARD) SHOULDER	F81004-56	6	

5.3 Guards



REF.	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY
1	GUARD, LEFT SIDE	098857-1	1
2	GUARD, RIGHT SIDE	098858-1	1
3	GUARD, TOP	098859-1	1
4	BOLT, M6x12-8.8 HEX HEAD FULL THREAD ZINC	F81001-7	10
5	WASHER, Z 6.1 SPLIT LOCK ZINC	F81053-3	10
6	WASHER, 8.4 FLAT ZINC	F81054-1	12
7	NUT, M8-8-B HEX NYLON ZINC LOCK	F81032-2	2

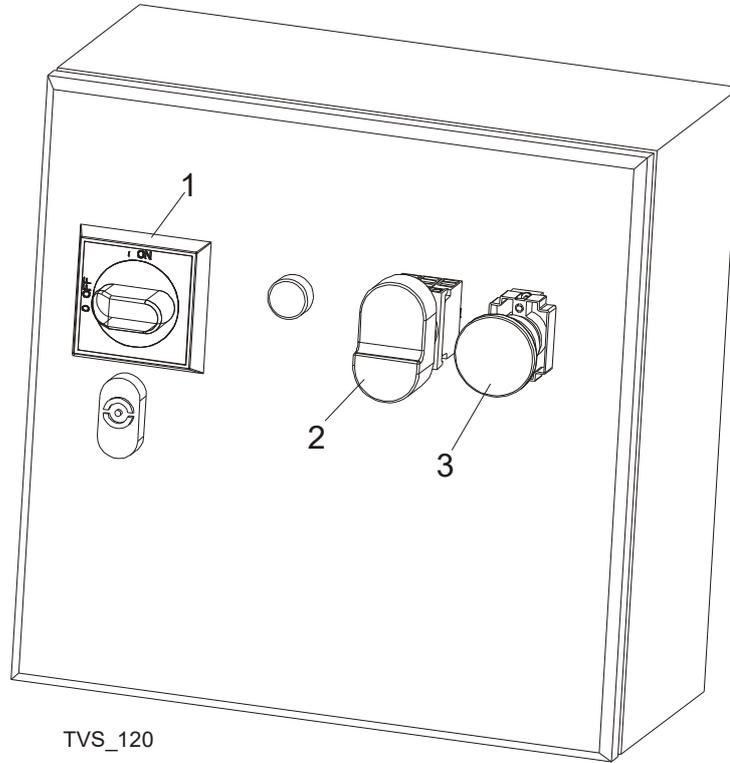
5.4 Legs



REF.	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY
1	LINK, SLPLD MIDDLE	098848-1	1
2	CROSSBEAM, SLPLD	089880-1	4
3	LEG, SLPLD HORIZONTAL H=500MM	098923-1	6/9 ¹
4	BOLT, M16 X 50-8.8 HEX HEAD	F81006-7	64/96
5	WASHER, 17 FLAT ZINC	F81058-1	128/212
6	NUT, M16-8 HEX NYLON ZINC LOCK	F81036-2	64/96

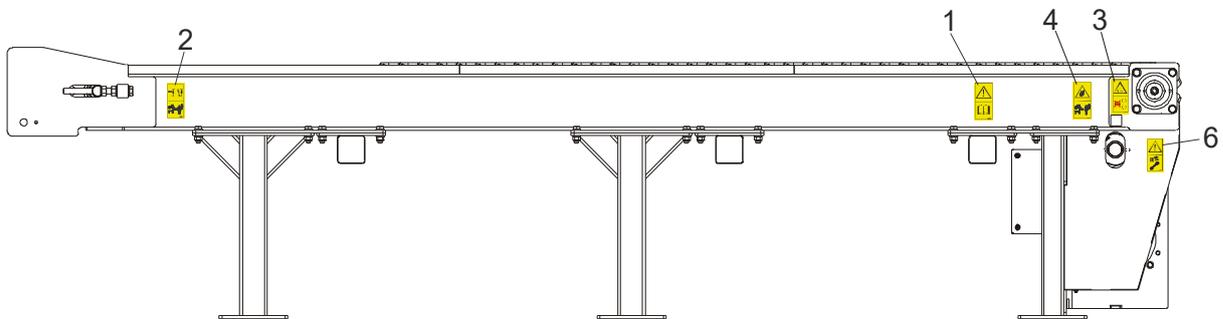
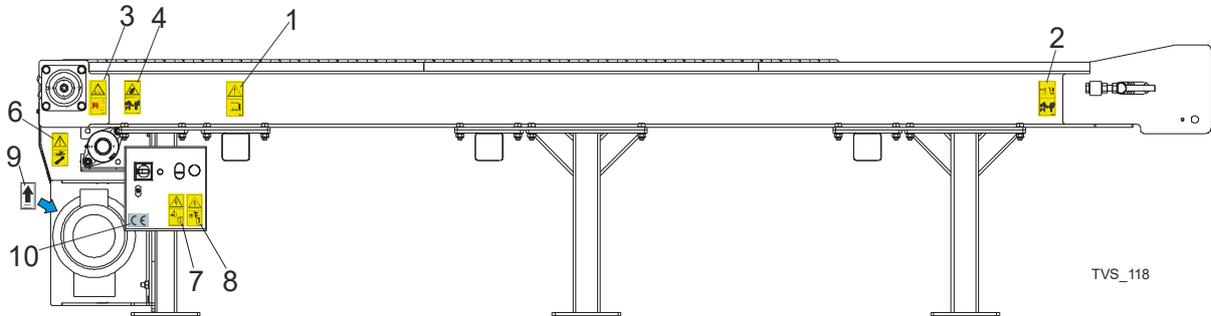
¹Version with middle module.

5.5 Control Box



REF.	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY	
	ELECTRIC BOX W/LIGHT CURTAIN	099862-L	1	
1	◆ KNOB, OHB2AJ ABB SWITCH	088265-1	1	
2	◆ SWITCH, 24V START/STOP ILLUMINATED	090452	1	
3	◆ BUTTON, XB4 BS542 EMERGENCY STOP	086556	1	

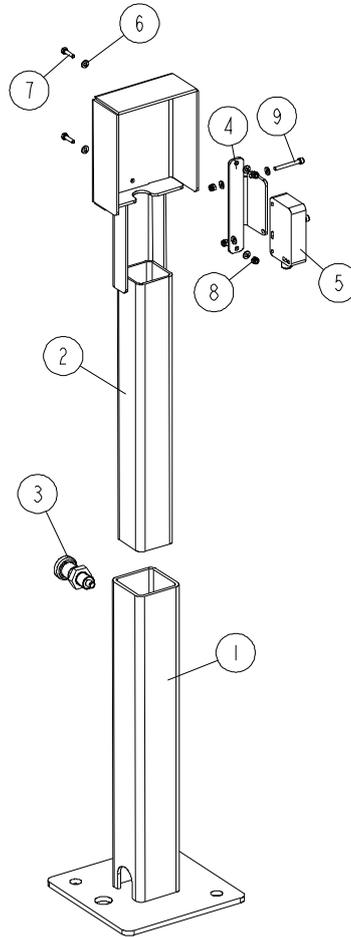
5.6 Decals



REF.	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY
	DECAL KIT, SLPLD PICTOGRAPHIC	100598	1
1	Decal, Read the operator's manual	096317	2
2	Decal, Keep away warning	096314	2
3	Decal, Gear caution	099540	2
4	Decal, Keep a safe distance away	099221	2
5	Decal, Sawmill covers caution	099220	1
6	Decal, Disconnect power supply before servicing	098177	1
7	Decal, Hazardous voltage inside the electric box	096316	1
8	Decal, Remove the plug before opening the electric box	096319	1
9	Decal, 1400 RPM Motor Direction	S20097H	1
10	DECAL, CE CERTIFIED SAWMILL	P85070	1

5.7 Light Curtain Mount Post

534636_001
534636_MANUAL



REF.	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY	
-	POST, LIGHT CURTAIN MOUNT - COMPLETE	534636	1	
1	POST, LIGHT CURTAIN MOUNT - BASE	099150-1	1	
2	POST, LIGHT CURTAIN MOUNT - ADJUSTABLE PART	099152-1	1	
3	PIN, 817-8-8-C-NI DETENT	090197	1	
4	PLATE, PHOTOELECTRIC SENSOR MOUNT	534637-1	1	
5	SENSOR, PHOTOELECTRIC	532819	1	
6	WASHER, 4.3 FLAT ZINC	F81051-2	8	
7	BOLT, M4X16-8.8 HEX HEAD FULL THREAD ZINC	F81011-6	2	
8	NUT, M4-8 HEX NYLON ZINC LOCK	F81029-1	4	
9	SCREW, M4X35 8.8 HEX SOCKET HEAD CAP ZINC	F81011-34	2	

EC declaration of conformity according to EC Machinery Directive 2006/42/EC, Annex II, 1.A

Manufacturer:

Wood-Mizer Industries sp. z o.o.
Nagórna 114, 62-600 Koło; Poland
Tel. +48 63 26 26 000

This declaration of conformity is issued under the sole responsibility of the manufacturer.

Following machine in our delivered version complies with the appropriate essential safety and health requirements of the EC Machinery Directive 2006/42/EC based on its design and type, as brought into circulation by us. In case of alteration of the machine, not agreed by us, this declaration is no longer valid.

We, the undersigned herewith declare, that:

Designation of the machine: **Log Deck**
TYPE: LD1
No. of manufacturer:

**Is in conformity with the following
EC directives:**

EC Machinery Directive 2006/42/EC
EC Electromagnetic Compatibility Directive
2014/30/EU

**And is in conformity with the following
Harmonized Standards:**

PN-EN ISO 12100:2012
PN-EN ISO 13849-1:2016-02
PN-EN 60204-1:2010
PN-EN ISO 13857:2010
PN-EN ISO 14120:2016-03

Responsible for Technical Documentation:

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Place/Date/Authorized Signature:

Koło, 03.03.2015



Title :

Engineering Manager