



Operating Instructions

AutoChop 300

Manufacturer

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Serial Number : _____

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Foreword

Thank you for purchasing our EHS AutoChop300.

This machine has been manufactured in line with European standards and regulations.

This manual explains how to use the machine safely and efficiently. It must be made available to all operators and all operators must read and understand its contents before operating the machine.

Liability for defects

We accept no liability for damage or disruptions caused by failure to observe and follow the operating instructions.

Claims are null and void for improper use, faulty attachments and drives not supplied with the machine, failure to use original spare parts and accessories and any conversions or modifications not agreed with Portnahinch Products Ltd in writing. We are not liable for the defects of wearing parts.

Any claims for liability must be reported as soon as the defect is identified.

Reservations

Technical data, dimensions, illustrations of the machine and safety standards are subject to continual change and are therefore not in any circumstances binding in relation to the supplied machine.

Definitions

Operator – the person who operates the machine for its intended purpose and who is qualified to use it and/or the person who causes the machine to be operated by trained operating personnel.

Operating Personnel – those staff entrusted by the operator to operate the machine.

Technical Personnel – those staff entrusted by the operator with specific tasks such as installation, set-up, maintenance and/or troubleshooting.

Electrician – a qualified person with knowledge of electrical systems, standards and regulations.

Machine – EHS AutoChop300.

Explanation of safety symbols

			
<p>Face shield must be worn</p>	<p>Foot protection must be worn</p>	<p>Protective clothing must be worn</p>	<p>Hand protection must be worn</p>
			
<p>Oil Level</p>	<p>Eye protection must be worn</p>	<p>Hearing protection must be worn</p>	<p>Head protection must be worn</p>

General Safety Information

The machine may only be operated by persons who have read and understand the machines operating manual. It is the operator's responsibility to provide appropriate personnel training.

The minimum age of the operative is 18 years.

The machine must only be operated when it is in perfect working condition.

Persons under the influence of drugs, alcohol or any substances that impair a person's responsiveness must not operate or maintain the machine.

Only operate the machine when it is in a stable position.

The operator must take regular breaks to ensure full concentration.

Only one person may operate the machine at any one time.

The work area must be appropriately illuminated as poor lighting can increase the risk of injury.

Never operate the machine without protective guards in place.

Ensure set-up, repairs, cleaning and maintenance are carried out when the machine is switched off and in a stable position. If the machine has a PTO drive the universal joint shaft must be removed from the tractor. If the machine is driven by an electric motor the main switch must be set to zero and the power cable disconnected.

Never leave the machine running unattended.

Switch off the machine before performing any adjustments, any maintenance or any cleaning.

Do not modify or tamper with the machine.

Electrical work must only be carried out by qualified electricians.

Only use original EHS spare parts.

Machines with electric motors must not be used in the rain as this can lead to a malfunction of the switch and/or motor.

Safety Instructions

Wear safety shoes and close-fitting clothing.

Wear protective gloves.

Wear safety goggles.

Keep the work area free of chips and wood residues.

Shut the machine down before removing any jammed pieces of wood.

The max log length is 16-20cm

The working pressure of the hydraulic system must not exceed 160 bar.

Noise

Ear protection is necessary.

Other Risks

- Injury caused by flying log pieces
- Risk of burns
- Human error

Proper Use

The machine is designed for splitting logs with a diameter of 10-30cm and a length of 16-20cm or 10-15cm for a short leg model.

Use soft wood only.

The length of the wood must not exceed 20x20cm.

The machine may only be used to process firewood.

Description

The AutoChop300 is a wood processing machine which can be used to produce soft kindling wood from round or square timber.

The wood is fed via the feed belt of the feeding device to the splitting tool and split.

The size of the wood can be set with the continuously variable feeder.




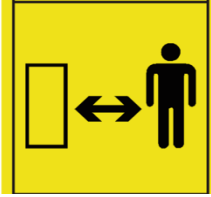



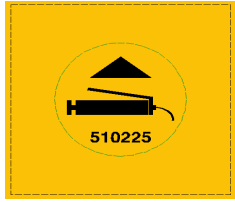
The finished kindling is conveyed to the outlet and ejected.

The splitter is driven hydraulically by either an electric motor or PTO shaft.

Additional Equipment

Screw-on kit for conversion from long to short logs 12-15cm

Stickers and their meaning

	Warning		Check services manual
	Risk of crushing		Stay clear
	Rotating equipment		Moving rotator
	Always read manual before use		Grease point

Set-up

Ensure the machine is in a stable position before use.

Only use on a level, firm and clear work surface.

Start-up

Before start-up always check;

- -that protective guides and safety systems are in place and working,
- -the hydraulic hoses and oil levels and
- -the condition of electrical cables.

Driven by tractor via universal joint shaft

Assemble the machine on the three-point linkage of the tractor.

Attach the universal joint shaft and secure with safety chain.

Clockwise rotation of the PTO shaft.

Turn the tractor's manual throttle to minimum.

Slowly engage the tractor PTO shaft and allow the machine to start moving.

Set the required PTO shaft speed using the manual throttle.

Max PTO shaft speed : 420rpm

The maximum PTO shaft speed must never be exceeded, otherwise the oil will become too hot which can lead to premature wear and leaks in the pump, cylinder and hydraulic pipes.

Before disengaging the universal joint shaft set the manual throttle of the tractor to minimum and disengage PTO and stop engine.

The universal joint shaft must be stored in the universal joint shaft linkage when it is disconnected.

Operation

At outdoor temperatures of less than 0° allow the machine to run idle for 5 minutes to allow the hydraulic system to reach the correct operating temperature.

Setting the billet size

For a faster feed (large billet) turn the throttle anti clockwise.

For a slower feed (small billet) turn the throttle clockwise.

Splitting

Only one person may operate the machine at any one time.

Make sure the wood is arranged so as to ensure an optimum feed.

Switch the main control to automatic mode.

Set the desired billet size with the feed controller.

Start with a larger billet size until the whole splitting blade is engaged and then switch to smaller billets.

Remove cut kindling wood from the extractor chute.

Only use soft wood with few knots and do not exceed stated dimensions.

Faulty operation when splitting

When you open the protective cover the splitting blade goes to the home position and the feed belt is stopped.

After opening move the automatic mode control lever to the 0 position.

The wood can now be straightened or removed.

Switching off the machine

Before turning off the machine depressurise all hydraulic functions by placing all control levers in the neutral position.

Driven by Electric Motor 3 Phase

Stop machine by pressing the RED button.

Switch off the isolator.

230V

Stop the machine by pressing the RED button.

Driven by tractor via universal joint shaft

Turn the manual throttle to minimum.

Disengage the PTO drive on the tractor.

Transport

It is vital that the machine is switched off before transport.

Disconnect the machine from the mains supply and pull the plug out of the machine.

Turn the manual throttle to minimum and disengage the universal joint shaft on the tractor.

Transporting by three-point linkage on the tractor

Attach the machine to the three-point linkage and use the tractor hydraulics to raise it. If the tractor's rear lights are obscure a light must be fitted to the rear of the machine.

Due to the weight of the machine the tractor machine combination could become unstable.

Checks

Before carrying out any checks on the machine, the drive must be switched off. Disconnect the machine from the mains supply and pull the plug out of the device.

Protective guards must be in place on the machine at all times.

All screws and nuts must be tightened after the first hour of operation. Then tighten screws and nuts after every 100 hours of operation. Replace any missing screws and nuts as soon as identified.

Before start-up check the condition of electrical cables and immediately replace any damaged cables. This work must only be carried out by a qualified electrician.

After the first hour of operation check that all hydraulic connections are secure and not leaking. Check then after every 100 hours of operation. Any damaged hydraulic lines must be replaced immediately.

To check the oil level place the machine on an even surface and check the oil with the splitting blade retracted.

When the oil sight glass is filled above halfway the oil is at its maximum. When the oil level is below halfway the oil is at its minimum and should be topped up immediately.

The oil filter only needs to be checked when the oil is changed.

Maintenance

Before carrying out any maintenance of the machine the drive unit must be switched off. Disconnect the machine from the main supply. Pull the plug out of the machine. Never work without protective guards and work on electrical equipment must only be carried out by a qualified electrician. Only use original EHS spare parts.

Lubrication

The machine should be lubricated daily (where used) at the central lubricating point on the top cover.

For optimum lubrication the machine may be started briefly- in automatic mode with all protective equipment in place.

Dispose of oil and grease in accordance with legal regulation.

Oil changing

The first oil change should be carried out after 500 hours of operating and subsequent changes should be carried out after every 1000 hours of operating or at least annually.

Oil changing procedure

1. Retract the splitting blade before changing the oil.
2. Remove the ventilation screw.
3. Open the oil drain screw.
4. Drain the hydraulic oil into a container.
5. Screw the oil drain screw back into the tank and fill with new hydraulic oil through the ventilation screw opening.
6. Turn on the machine and allow it to run for a short while.
7. Check the oil level and top up the hydraulic oil if necessary.

Total filling capacity of the hydraulic system is 75 litres and a high-quality oil is highly recommended.

Feed Belt

Always check that the belt runs centrally. It must not run off centre. If this happens adjust as follows;

1. Loosen the lock nuts on both tensioning screws
2. Re-align the idler roller by tightening both tensioning screws evenly.
3. Lock the lock nuts on both tensioning screws.

Tensioning the belt

The conveyor belt may become slack over time as a result of wear and tear. If this happens the belt must be re-tensioned.

1. Loosen the lock nuts in both tensioning screws.
2. Tension the conveyor belt by tightening both tensioning screws evenly.
3. Tension the conveyor belt sufficiently (underside must not sag).
4. Lock the nuts on both tensioning screws.

Packing Chute

The packing chute makes it easy to pack cut wood in layers in the net bag.

To operate pull the net bag over the packing chute and fill the net bag with the cut wood.

Cleaning

Before carrying out any cleaning work the drive unit must be switched off. Disconnect the machine from the mains supply and pull the plug out of the device.

Clean the machine regularly to ensure proper operation. Only wash new machines during the first 3 months with a sponge. As the paint is not completely set cleaning with a high-pressure cleaner may damage the finish.

Troubleshooting

Before carrying out any troubleshooting operations it is essential to switch the drive off. Disconnect from the mains and pull the plug out of the machine.

Disengage the universal joint shaft on the tractor and remove.

All work on electrical equipment must only be carried out by qualified electricians.

Fault	Possible Cause	Remedy
Electric motor fails to start or switches off frequently	<ol style="list-style-type: none"> 1. Faulty power supply cable 2. Fuses keep tripping 3. Motor circuit breaker tripped 4. Direction of rotation incorrect 	<ol style="list-style-type: none"> 1. Have the cable inspected 2. Use correct rated fuses 3. Use stronger power supply cable 4. Swap over two phases
Switch not working	<ol style="list-style-type: none"> 1. Faulty power supply cable 2. Fuses keep tripping 3. Contactor or motor circuit breaker faulty 	<ol style="list-style-type: none"> 1. Have the cable inspected 2. Use correct rated fuses 3. Have switch inspected
Splitting blade not extending	<ol style="list-style-type: none"> 1. Switch elements jammed 2. Not enough hydraulic oil in the system 	<ol style="list-style-type: none"> 1. Inspect switch elements 2. Change hydraulic oil
Hydraulic oil getting too hot	<ol style="list-style-type: none"> 1. Not enough hydraulic oil in the system 2. Poor quality hydraulic oil 3. Dirty oil filter 	<ol style="list-style-type: none"> 1. Check hydraulic oil level 2. Change hydraulic oil 3. Change filter insert
Machine loses power	<ol style="list-style-type: none"> 1. Hydraulic oil getting too hot 2. Not enough hydraulic oil in the system 	<ol style="list-style-type: none"> 1. See “hydraulic oil getting too hot” above 2. Top up hydraulic oil
Machine is too noisy	<ol style="list-style-type: none"> 1. PTO shaft is running too fast 2. Oil filter blocked 	<ol style="list-style-type: none"> 1. Adhere to specified speed 2. Change filter insert
Feed belt does not move or jerks	<ol style="list-style-type: none"> 1. Not enough hydraulic oil in the system 2. Poor quality hydraulic oil 3. Conveyor belt too slack 	<ol style="list-style-type: none"> 1. Top up hydraulic oil 2. Change to good quality hydraulic oil 3. Readjust the belt
Hydraulic cylinder leaking	<ol style="list-style-type: none"> 1. Sealing sleeve worn 2. Piston rod guide loose 3. Piston rod damaged 	<ol style="list-style-type: none"> 1. Renew sealing sleeves 2. Retighten piston rod guide 3. Renew piston rod



EU Declaration of Conformity

We,

Portnahinch Products Ltd,

Of,

Portnahinch, Portarlington, Co. Laois, Ireland.

Declare under our sole responsibility as the body authorised to prepare the technical file for the product:

Machine Name: **Kindling Machine**

Model Name: **EHS Autochop 300**

Declaration of Conformity Number: **2020.141-2**

Complies with the relevant provisions of:

- **2006/42/EC – Machinery Directive**

Complies with the following relevant clauses of:

- **ISO 12100: 2010 Safety of Machinery – General Principles for Design – Risk Assessment and Risk Reduction.**

We declare the technical file for this machine was compiled meeting the provisions of the listed directive(s) above and undertake to forward these to market monitoring authorities by request. This declaration is invalidated by any modification outside the scope of those identified by the manufacturer.

Authorised representative for the compilation of the relevant technical documentation:

Signed:  Date: 30/11/2020
Arc Management Systems, Unit 1, Cillin Hill, Co. Kilkenny, Ireland, R95 A4VP.

Manufactures representative for the approval of the relevant technical documentation and issuer of EC Declaration of Conformity:

Signed: _____ Date: _____
Portnahinch Products Ltd, Portnahinch, Portarlington, Co. Laois, Ireland.

Place of issue: **Ireland**

