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Operating Instructions

by

SPECIALMACHINES

BELTINGTOOLS COMPONENTS

Wedge Peeling Machine with Drive Unit **PTWE**



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Introduction

We would like to congratulate you for having purchased the Müssel-Belting Tools made by Müssel Maschinenbau GmbH and to thank you for the confidence you placed in us.

This operating instruction provides you with important information for the proper and safe use of the wedge peeling machine with drive unit, **PTWE**.

Owing to our experience over decades in the development and the fabrication of finishing tools for conveyor belts and driving belts, these devices have been designed according to the latest state of technique and in compliance with this application. Please find further information on splicing types and finishing parameters in the detailed splicing instructions or in the belt specific technical data sheets of the belt manufacturer.

Please note that the future usage conditions of the conveyor belt have to be considered for the choice and the finishing of splices.

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<u>1</u> General Information

1.1 Name and address of the manufacturer:

Müssel Maschinenbau GmbH Reichelsweiherstraße 8 95615 Marktredwitz GERMANY

1.2 Identification of the machine

Product designation: Serial/Type designation: Serial number: Year of construction: Wedge peeling machine with drive unit PTWE see type label see type label

1.3 CE-Declaration

see fixed label





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1.4 EC Declaration of conformity

EC DECLARATION OF CONFORMITY within the meaning of EC Machinery Directive 2006/42/CE (Appendix II A)

The manufacturer Müssel Maschinenbau GmbH Reichelsweiherstraße 8 95615 Marktredwitz GERMANY

hereby declares that the below indicated machine due to its design and its construction as well as in the execution placed on the market complies with the relevant essential health and safety requirements of the EC machinery directive.

This EC declaration of conformity loses its validity upon the machine becoming altered or modified without the manufacturer's approval.

Product designation:	Wedge peeling machine with drive unit	
Serial/Type designation:	PTWE	
Serial number:	see type label	
Year of manufacture:	see type label	

EC Directives: **2006/42/CE** Machinery Directive **2006/95/CE** Low Voltage Directive **2004/108/CE** Electromagnetic Compatibility (EMC) Directive

The following harmonized standards were applied: EN ISO 12100 Safety of Machinery – Principles for design EN 60204-1 Electrical equipment of machines EN 61000 Electromagnetic compliance

The particular operating instructions must be observed. A CE-label is attached at the machine.

Marktredwitz, 18.05.2015Langner Reinhard (Vice President of Establishment)Place, DateName, first name (company function)

Signature

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2 General Safety Instructions

The following document contains important information on serious risks when operating the tool described or important technical information on the tool or processes used. Symbols are used to highlight this important information and indicate as follows:



This symbol is always to be found in connection with an endangerment and its respective signal word.

Signal words hierarchy:

- **Danger:** This signal word is indicating a person endangerment with a high risk level which causes death or serious injury, in case it cannot be avoided.
- **Warning:** This signal word is indicating a person endangerment with a medium risk level, which can cause death or serious injury, in case it cannot be avoided.
- **Caution:** This signal word is indicating an endangerment with a low risk level which can cause a minor or moderate injury, in case it cannot be avoided.
- **Attention:** This signal word is indicating a warning of material and environmental damages.

2.1 Basics

This device has been built as state of the art and according to the fundamental health and safety requirement of the EC machinery directive. However, its usage may result in risks to the body or life of users or third parties, or adverse effects to devices and other property.

The device may only be used in proper technical condition as intended, in a safety- and hazard conscious manner and observing the operating instructions! Any functional disorders have to be rectified immediately by technical staff.

Observing the operating instructions and adhering to the inspection and maintenance conditions are also parts of the intended use.

2.2 Organisational Measures

The operating instructions must always be at hand at the place of use of the device!

In addition to the operating instructions, observe and instruct the user in all other generally applicable legal and other mandatory regulations relevant to accident prevention and environmental protection!

The operating instructions must be supplemented by instructions covering the duties involved in supervising and notifying special organizational features, such as job organization, working sequences or the personnel entrusted with the work.

Please only assign trained personnel familiar with the operating instructions on the device.

Check at regular intervals whether the personnel are carrying out the work in compliance with the operating instructions and paying attention to risks and safety factors!

In order to minimize the risk of injury, garments must be close-fitting. Furthermore long hair must be tied back and jewellery -including rings- have to be removed before beginning work.

Observe all safety instructions and warnings attached to the device and see to it that they are always complete and perfectly legible!

If the operating behaviour changes immediately stop the device and report the error to the responsible department/person!





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Never make any modifications, additions or conversions which might affect safety without the supplier's approval.

Additional mountings or modifications have as consequence that the responsibility for the accordance with the EU-directive has to be assured by the person who carries out the mountings and the modifications.

Spare parts, only, from the original equipment comply with the technical requirements specified by the manufacturer and guarantee the failure-free operation of the device.

2.3 Personnel selection and qualification

The device can only be operated by staff accordingly skilled and instructed.

Work on the device electrical equipment must be performed by a qualified electrician or trained individuals under the direction and supervision of an electrician according to electro-technical regulations.

2.4 Safety Instructions for specific operating phases

The device can only be operated in a safe and absolutely reliable state. Make sure in particular that all protective and safety-oriented devices are in place and fully functional.

Loosened screws and hose connections must be tightened upon completion of the maintenance and repair work.

2.5 Mobile devices

In case of minor changes of place, please even disconnect the device from any external power supply! Properly reconnect to the mains prior to restarting the device!

Always use hoisting and slinging equipment with sufficient weight bearing capacity for loading! Position hoisting devices or slinging means only on the load lifting appliances of the device that is provided for this purpose.

Please take the necessary and appropriate measures for making sure that during the transportation no device part may fall in or loosen.

2.6 Safety instructions

The removing of covers or parts of safety-oriented components may increase the risk of accident. Conversions, maintenance and repair work must be performed by trained, competent and skilled persons.

Because of the risk of burns, make sure the device is always freely accessible and is not covered.

The devices do not have their own protection appliances against electrical overload. For this reason, the operator must ensure that the electrical installations at the operated place, are protected from overload.

Regularly inspect/check the electrical equipment of a device. Visible faults, such as loose connections must be immediately rectified.





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3 Product Description

3.1 Components and proper usage

Using the PTWE wedge peeling machine you can prepare ends of belts by bevelling them.

The wedge peeling machine consists of the following components and functional groups:



Designation	Components
1	Star grip screw
2	Basic tool
3	Knife holder
not shown	Peeling knife
4	Knurled roller
not shown	Motor

3.2 How it works

The PTWE is a tool that must be affixed to a suitable device or on a work bench. With this tool, ends of belts can be tightly fixed between two knurled rollers whose position relative to one another can be adjusted. By turning the knurled rollers the ends of the belt are pressed into a fixed, diagonally positioned peeling knife.

You can find more information on how the wedge peeling machine works in chapter "5 Handling".

3.3 Technical data

Belt width max.	mm	unrestricted
Belt thickness max.	mm	7
Wedge length max.	mm	65
Length	mm	350
Width	mm	460
Height	mm	295
Weight (net)	kg	36,0
Voltage	V	400
Capacity	W	370

Material number	Designation
7870242	PTWE incl. drive unit





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4 Preparing the product for usage

Before operating the tool, the following steps must be carried out each time to ensure the tool works properly. Check the following points:

4.1 Transport

When transporting, ensure the wedge peeling machine is only transported or stored when locked, so that the knurled rollers cannot damage the knife.

4.2 Positioning

Wedge peeling machines can only be fixed to stable surfaces.

4.3 Electric installations

The voltage of the device and of the mains must be the same!

Turning direction of the knurled rollers:

Due to the various phase sequence of the three-phase mains supply, the knurled rollers may turn to the left or to the right.



The terminal box of the motor is equipped with an on-/off-switch with three switching positions:

- 1 = On-left-hand rotation or 1 = On-right-hand rotation0 = Off 0 = Off
 - 1 = On-right-hand rotation or 1 = On-left-hand rotation

Connect the device and briefly switch it on by means of the lever of the on-/off-switch.



- 4.4 Utilities
 - Setting gauge







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5 Handling

5.1 General

Wedge peeling machines are tools used when fabricating (preparing) belting material.

Warning



Be careful when handling knife blades and transport rollers! Danger of being injured by very sharp blades! Danger of being drawn-in or squeezed by the knurled transport rollers!

5.2 The peeling procedure

1. Fix the PS-WD-70/V onto a table device or on a workbench. Remove the belt guide table.

2. Loosen the clamping screw (allen screw), put the peeling knife in the knife holder and affix the peeling knife with the clamping screw through the long hole. In doing so hold the setting gauge between the knurled rollers and push the peeling knife towards the setting gauge till the peeling knife touches it. Affix the peeling knife with the clamping screw. Attach the belt guide table.















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4. Loosen the knife retainer and tilt it till the tilted knife edge touches the top and bottom knurled roller at certain points.



Attention



Risk of damage! The ends of the knife can be damaged if the knurled rollers continue to turn after the peeling knife has been tilted!

5. Fix the peeling guide stop so that it is parallel to the back edge of the peeling knife.



 \Rightarrow All settings are correct if a wedge-shaped, straight area for splicing is created. However the length of the splice (length of the sloping area) depends on the thickness of the belting material.









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6 Maintenance work

Before operating the tool, the following maintenance work must be carried out each time to ensure the tool works properly. If damage is established during maintenance that cannot be put right on site, the tool must no longer be used and must be sent for repair to the manufacturer.

Maintenance work:

- Generally keep the device clean
- Grease the thread of the star grip screw from time to time
- Grease the sprockets as required

Check the following each time before use:

- Peeling knife for damage
- Knurled rollers for wear and tear
- That the adjustment device for the knurled rollers is easy to operate
- Connectors and power supply for damage

Check yearly:

According to the VDE guideline 0701/0702 electrical tools must be checked once every twelve months on site or according to local regulations in each country.

Material number	Designation
7870243	Knife
7871165	Traction roller
7871582	Setting gauge
7871288	Knife holder
on demand	Knife stop
on demand	Washer with fixing screw for knife holder
7872257	Spur wheel set (2 pieces)
on demand	Bottom spindle ø 30 x 255 mm
on demand	Top spindle ø 30 x 255 mm
on demand	Cover, 2-parts

6.1 Spare parts

7 Disassembling and Disposal

The disassembling in individual components can only be effected by competent staff with a good knowledge of machine building.

Please sort out the machine according to the respective materials (metal, plastics, electronic) and recycle them.