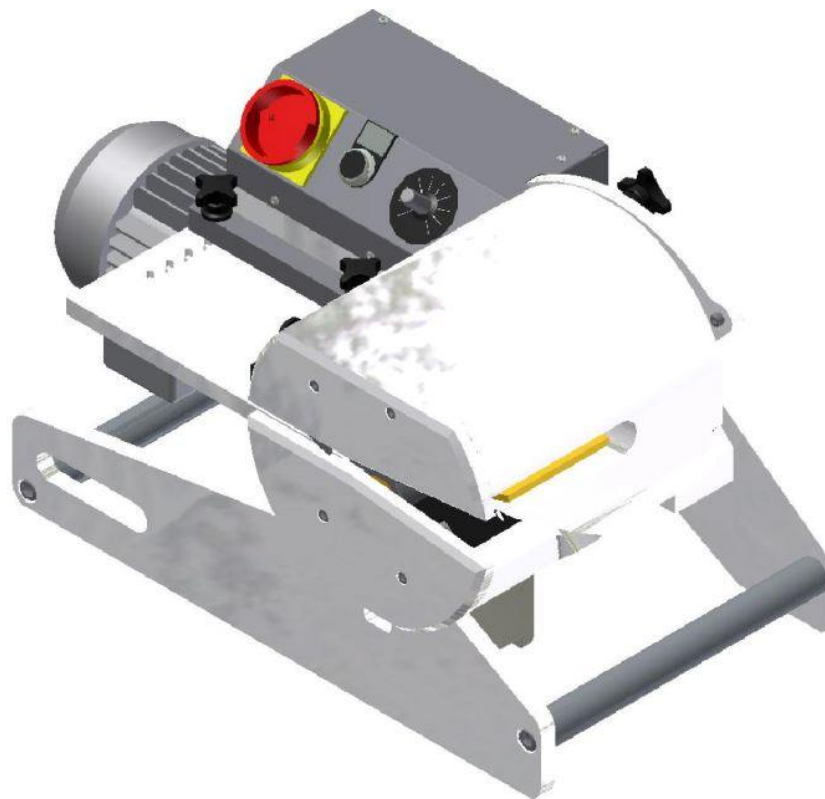




Operating Instructions

Peeling and Splitting Machine PTSE-V2



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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 peeling and splitting machine, **PTSE-V2**.

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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Contents

1 General Information

- 1.1 Name and address of the manufacturer
- 1.2 Identification of the machine
- 1.3 CE-Declaration
- 1.4 EC Declaration of conformity

2 General Safety Instructions

- 2.1 Basics
- 2.2 Organisational measures
- 2.3 Personnel selection and -qualification
- 2.4 Safety instructions for specific operating phases
- 2.5 Mobile devices
- 2.6 Safety instructions

3 Product Description

- 3.1 Components and proper usage
- 3.2 Mode of operation
- 3.3 Technical data
- 3.4 Accessories

4 Preparing the product for usage

- 4.1 Transport
- 4.2 Positioning
- 4.3 Electric installations
- 4.4 Utilities
- 4.5 Mounting and dismounting the knife

5 Handling

- 5.1 General
- 5.2 Adjusting the peeling and splitting thickness
- 5.3 Adjusting the peeling and splitting depth
- 5.4 The peeling respectively the splitting procedure
- 5.5 Disturbance

6 Maintenance work

- 6.1 Spare parts
- 6.2 Wear parts

7 Disassembling and Disposal



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1 General Information

1.1 Name and address of the manufacturer:

Müssel Maschinenbau GmbH
Reichelsweiherstraße 8
95615 Marktrechwitz
GERMANY

1.2 Identification of the machine

Product designation:	Peeling and splitting machine
Serial/Type designation:	PTSE-V2
Serial number:	see type label
Year of construction:	see type label

1.3 CE-Declaration

see fixed label



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 Marktrechwitz
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: Peeling and splitting machine

Serial/Type designation: PTSE-V2

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.

Marktrechwitz, 01.08.2015 Langner Reinhard (Vice President of Establishment)
Place, Date Name, first name (company function)

i.v. Langner
Signature



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!

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.

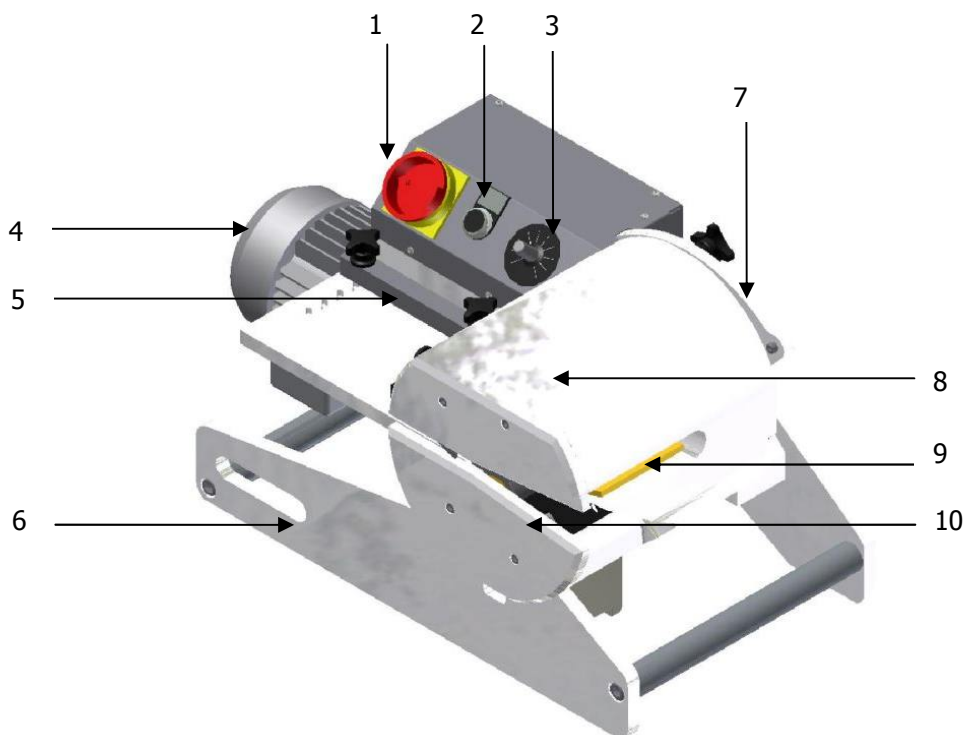
3 Product Description

3.1 Components and proper usage

The peeling and splitting machine PTSE-V2 is a fitting tool for fabricating (preparing) belting material. Peeling reduces – depending on the adjustable peeling depth – the thickness of the belting material (e. g. of the coating or the coating with fabric layers) whereby the thickness of the belting material decreases by removing material.

Splitting separates the belting material – depending on the adjustable level of splitting – between the fabric layers whilst not destroying the belting material.

The peeling and splitting machine consists of the following components:



Designation	Components
1	Main switch on/off
2	„Return“-button
3	Speed regulator
4	Motor
5	Guide stop for peeling and splitting depth
6	Rack
7	Adjusting lever for peeling and splitting thickness
8	Top knurled roller (under cover)
9	Peeling or splitting knife
10	Bottom knurled roller (under cover)

3.2 How it works

With this tool ends of belts can be fixed between two knurled rollers that relative to their position to one another can be adjusted by friction. By rotating the large knurled rollers the ends of the belt are pressed firmly through the fixed knife.

You can find more information on how the peeling and splitting machine works in the chapter „5 Handling“.

3.3 Technical data

Belt width max.	mm	unrestricted
Belt thickness max.	mm	8
Splitting depth max.	mm	120
Length	mm	650
Width	mm	340
Height	mm	350
Weight (net)	kg	64,0
Voltage	V	230
Capacity	W	370
Frequency	Hz	50 (60)

Material number	Designation
710107	PTSE-V2 peeling and splitting machine

3.4 Necessary accessories

Accessories are not included in the scope of delivery and must be ordered separately!

Material number	Designation
710108	Peeling knife for peeling overlap splices
710109	Splitting knife for layer splitting in preparation for Z-stepped splices

4 Preparing the product for usage

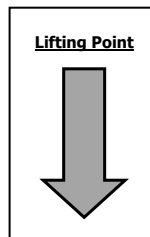
Before operating the tool, the following steps must be carried out each time to make sure that the tool works properly. Check the following points:

4.1 Transport

The transport / the relocation of the device should be carried out by an appropriate lifting appliance (regarding the minimum lifting force, please look at chapter "3.3 Technical data") or by minimum 2 persons. Prior to this relocation, the device should be disconnected from the energy supply (electrical current).

The tool may only be transported under observation of the generally valid safety regulations. Remove, or, affix transport locks!

Lift the heating press only at the provided lifting points „please refer to marking arrows lifting point“.



Attention



The tool is very top-heavy. Frequent tilting danger!

4.2 Positioning

Peeling and splitting machines can only be fixed on stable surfaces.

Please position the supplied foot switch in such a way that it can be easily reachable for the operator.

The foot switch is used for switching on and switching off the knurled rollers.



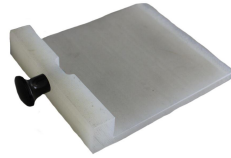
4.3 Electric installations

The existing mains voltage must be suitable for the tools' operating voltage according to the information on the type plate

Note rotational direction!

4.4 Utilities

- Plastic stopper for the knife



4.5 Mounting and dismounting the knife

1. Switch the PTSE-PTSE-V2 on at the main switch. Please consider the rotational direction!
2. Move the plastic stopper into the belt intake.
3. Activate the foot pedal so that the plastic stopper gets firmly clamped and touches flush top part.

Note:

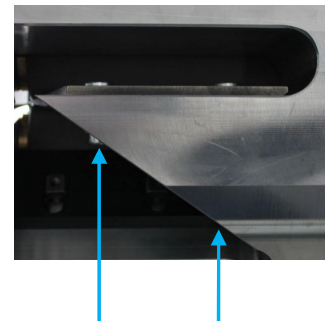
Should it be difficult to clamp the stopper, this could be eventually solved in changing a little the peeling and the splitting depth on the adjusting lever. (refer to section "5.2 Adjusting the peeling and splitting thickness")

4. Switch the machine off using the main switch and protect it against resetting.
5. Loosen both screws located at the bottom part of the knife holder.
6. Insert the knife and adjust it.

Note:

The knife must lie together with the blade against the plastic stopper.

7. Fix the loosened screws again.
8. Switch the machine on at the main switch. Please consider the rotational direction!
9. Please withdraw the plastic stopper. If necessary activate the "Return"-button, let the knurled rollers run backwards.



5 Handling

5.1 General

Peeling and splitting machines can only be used for fabricating belting material (here: preparation). Usage for any other purpose would be improper and make any guarantee invalid and exclude any liability whatsoever from the manufacturer.

Handling peeling and splitting machines of the PTSE-V2 requires substantial care and attention on the part of the operator.

Please note that you:

- Never operate the tool without protective devices
- Never reach into the tool during operation
- Only lift the tool by the handles and holding devices provided
- When changing the knives, place edge protection over the cutting edges

Warning



Be careful when handling knife blades and knurled rollers!

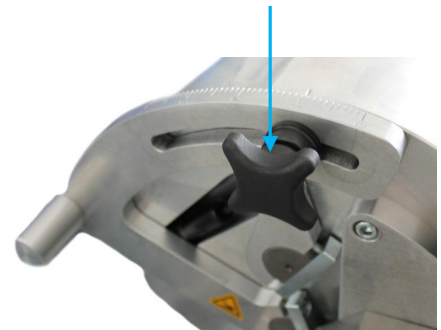
Risk of injury, by very sharp blades!

Risk of injury, make sure that clothing, hair etc. do not get caught between the knurled rollers. Always pull out the plug before removing protective devices.

Always refer to the appropriate splicing instructions for the belt type to be spliced when preparing belts.

5.2 Adjusting the peeling and splitting thickness

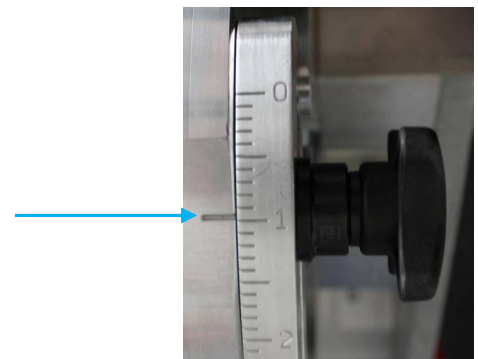
1. Switch the PTSE-V2 on at the main switch.
Please consider the rotational direction!
2. Loosen the star handle screw on adjusting lever.



3. Set the requested peeling or splitting thickness on the scale by turning the adjustment lever.

Note:

The numerical quantity value does not exactly correspond to the splitting thickness (mm), but is used, for this purpose, to retrieve the same adjustment.

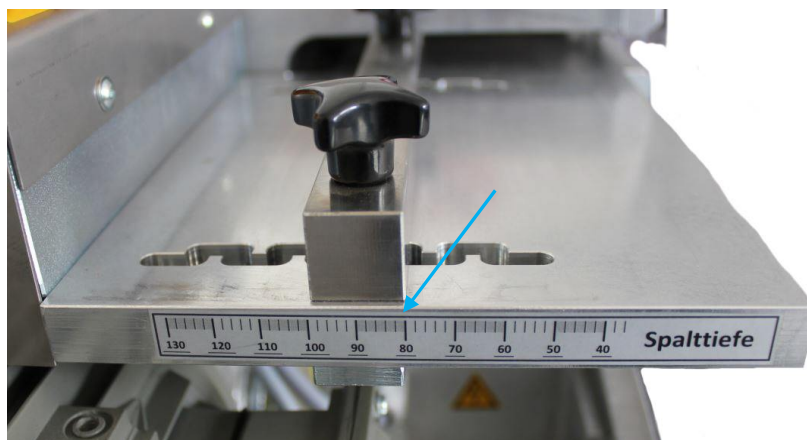


4. Tighten the star handle screw again.
5. Check the setting in making a splicing test.
Adapt accordingly the adjustment if needed.



5.3 Adjusting the peeling and splitting depth

1. Machine is switched on.
2. Please loosen both star handle screws on the guiding stopper.
3. Set the requested peeling depth, respectively, splitting depth on the scale in moving the guiding stopper.



4. Tighten the star handle screws.
5. Check the adjustment in making a splicing test. Adapt accordingly the adjustment if needed.

5.4 The peeling respectively the splitting procedure

1. Adjust peeling and splitting thickness as well as peeling and splitting depth.
2. Adjust the speed on the speed regulator.
Adjust the speed according to the belt type to be spliced.
3. Place the belting material in the guiding stopper.
4. Start the knurled rollers in activating the foot pedal.
5. Carry the splitting / peeling out, in letting the splicing ends one after another transversally run along the guiding stopper between the knurled rollers.

Danger



Never touch the aperture during the splitting or the peeling process.

5.5 Disturbance

Should disturbances appear during the splitting or peeling process, the operation can be stopped by loosing the foot pedal and with the „Return“-button for moving the knurled rollers backwards, so that the belting material can be removed from.

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.

Check the following each time before use:

- Peeling or splitting knife for damage
- Knurled rollers for wear and tear
- That the adjustment device for the knurled rollers is easy to operate
- On a regular basis make sure screws and bolts sit perfectly
- Occasionally lubricate moveable parts (bolts, runners etc)

Check after using several times:

- Lubricate slide bearings of the knurled rollers and the driving chain, as well, after 25 hours of operation.
- The peeling or splitting knife.
Cutting edges on the blades must not be damaged or blunt.
If necessary replace the blades or re-sharpen them.

Warning



Risk of injury! The operator risks bruising from rotating knurled rollers and injury from open blades.

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.

6.1 Spare parts

In our scope of delivery we do provide a warranty of 12 months from the date of delivery.

Number	Designation	Type / DIN	Quantity	Unit
(ENG-036264)	Gear motor drive capacity motor voltage motor frequency speed flange quill shaft	HAIE1 712-4 P050FB06C0-QB3 0,37 kW 400 V 50 Hz 41,7 1/min without ø 25 mm	1	PC
(ENG-019051)	Frequency converter	Taian E2-2P5-H1F	1	PC
ENG-039574	Gas spring		1	PC
STD-001080	Needle bush (built-in the knurled roller complete)	HK2820	4	PC
(ENG-014326)	Foot switch	XPEY310	1	PC
STD-000149	Ball bearing in bend pulley (built-in)	6004-2RS	2	PC
STD-001149	Grooved ball bearing	6005-2RS	4	PC
STD-000134	Grooved ball bearing	6202-2RS	2	PC
ENG-036446A	Drive shaft 1		1	PC
ENG-036445A	Drive shaft 2		1	PC
ENG-036103A	Eccentric shaft		2	PC
STD-001429	Grooved ball bearing (built-in the chain tensioner)	6001-2RS	1	PC

6.2 Wear parts

Materials and parts that are enumerated in the technical instructions as wear parts are excluded from the guarantee. The term mentioned above is a limitation period.

Number	Designation	Type / DIN	Quantity	Unit
ENG-036472	Scraper wedge		1	PC
ENG-036101	Knurled roller		2	PC
(ENG-036153)	Drive chain	10 B-2	1	PC
ENG-036718	Chain wheel		2	PC
ENG-036932A	Chain wheel chain tensioner		1	PC



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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.