



Operating Instructions

Hand-Z-Shears for Z-Splices CZ 120 M



Müssel Maschinenbau GmbH
Reichelsweiherstraße 8
95615 Marktredwitz
GERMANY
Tel.: +49 9231 9980-0
Fax: +49 9231 9980-80
E-Mail: kontakt@muessel.com



CONVEYOR TECHNIQUE
SPECIALMACHINES
BELTINGTOOLS
COMPONENTS



engineering fabrication servicing

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 hand-z-shear, **CZ 120 M**.

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.

The reproduction, distribution and utilization of this document as well as the communication of its contents to others without express authorization is prohibited as far as this is not explicitly allowed by Müssel Maschinenbau GmbH. Offenders will be held liable for the payment of damages. All rights reserved.

Any liability for errors and printing errors is excluded.

Contents

- 1 General information**
 - 1.1 Name and address of the manufacturer
 - 1.2 Identification of the device
 - 1.3 CE-Declaration
- 2 General safety instructions**
 - 2.1 Usage in accordance with regulations
 - 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 Possible Z-splices
 - 3.5 Accessories
- 4 Preparing the product for usage**
 - 4.1 Transport
- 5 Handling**
 - 5.1 General
 - 5.2 Punching procedure
- 6 Maintenance work**
 - 6.1 Spare parts
- 7 Disassembling and disposal**



CONVEYOR TECHNIQUE
SPECIALMACHINES
BELTING TOOLS
COMPONENTS

by



engineering fabrication servicing

1 General information

1.1 Name and address of the manufacturer:

Müssel Maschinenbau GmbH
Reichelsweiherstraße 8
95615 Markredwitz
GERMANY

1.2 Identification of the device

Product designation:	Hand-Z-shear for Z-splices
Serial/Type designation:	CZ 120 M
Serial number:	see type label
Year of construction:	see type label

1.3 CE-Declaration

see fixed label



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 Usage in accordance with regulations

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!

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 of 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.

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

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 are 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.

3 Product description

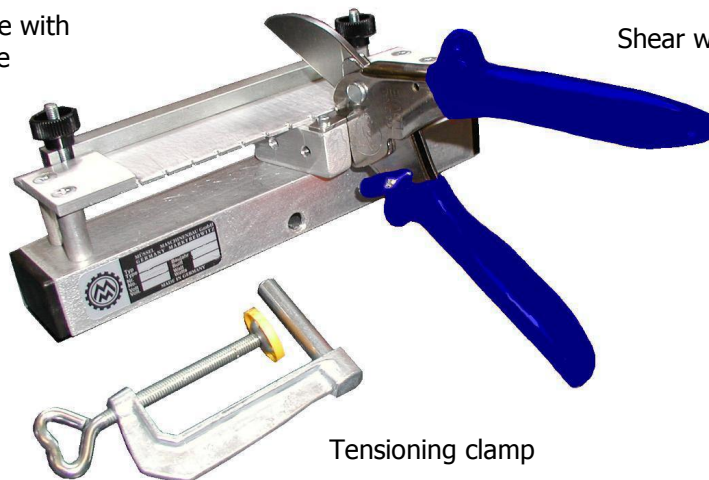
3.1 Components and proper usage

Hand-Z-shears are small tools for preparing Z-splices for used in fabricating (here: preparing) belting material.

With the CZ 120 M hand-held shears you can prepare 35-mm long Z-splices. The tool consists of the following components and functional groups:

Clamping table with
punching plate

Shear with block



Tensioning clamp

3.2 Mode of operation

The CZ 120 M is operated by hand and the Z fingers are cut one after the other. To do this the belt end to be prepared must be affixed to the plate.

You can find more information on how the shears work in the chapter „5 Handling“.

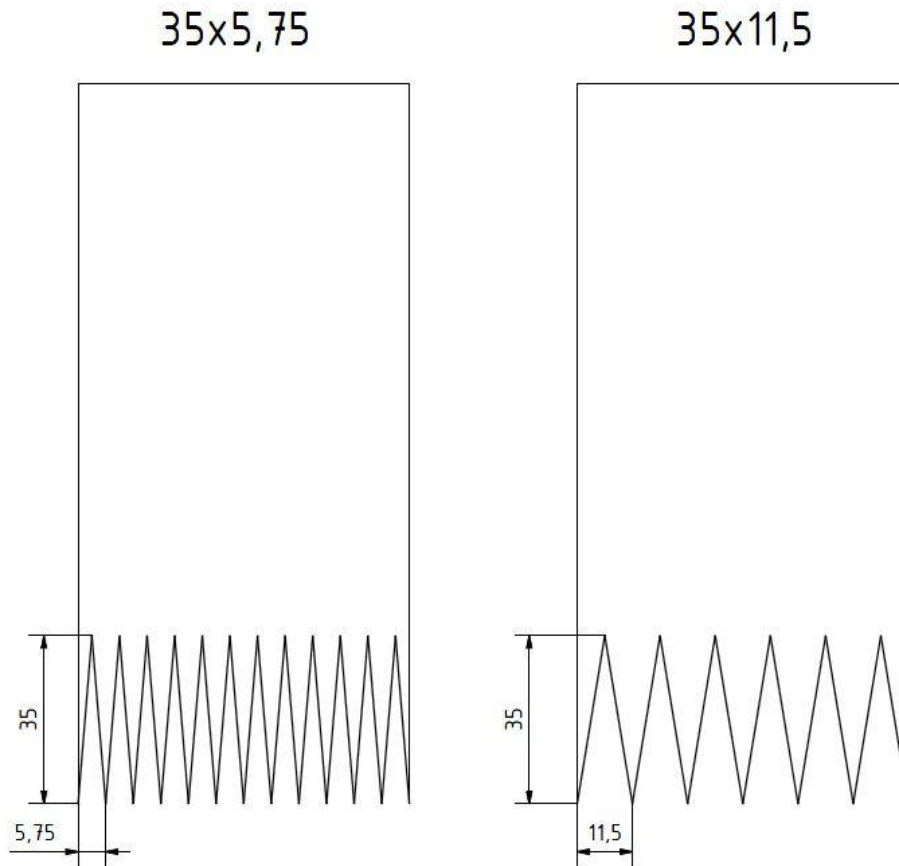
3.3 Technical data

Belt width max. (only 90°)	mm	120
Belt thickness max.	mm	3,2
Length	mm	215
Width	mm	60
Height	mm	55
Weight (net)	kg	1,3
Splicing angle	°	90
Type of splice		Z 35 x 5,75 Z 35 x 11,5

Material number	Designation
7872808	CZ 120 M (35 x 5,75)
7872576	CZ 120 M (35 x 11,5)

3.4 Possible Z-Splices

Following Z-splices can be prepared with the hand-z-shear:



3.5 Accessories

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

Material number	Designation
7870017	Double-sided adhesive tape 50 m x 50 mm

4 Preparing the product for usage

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

4.1 Transport

When transporting, ensure the shears are only transported or stored when they are closed. This protects the blades best from damage.

5 Handling

5.1 General, proper usage

Hand-Z- shears are small tools for preparing Z-splices for used in fabricating (preparing) belting material.

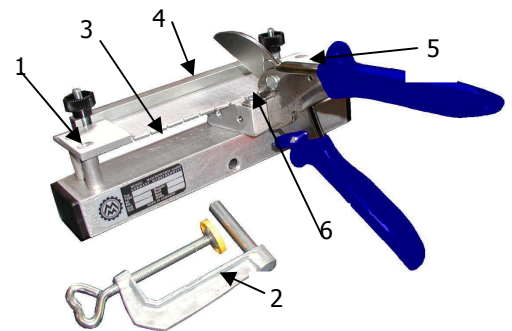
With the hand-held shears CZ 120 M you can prepare 35 mm long Z-splices.

5.2 Punching procedure

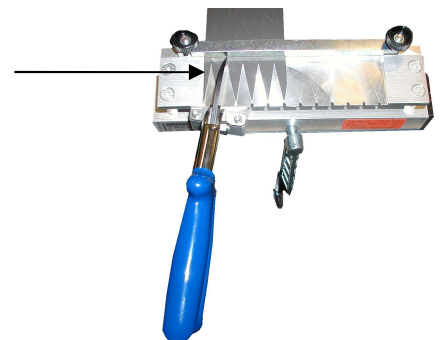
In this section we will deal with the manual punching procedure where the operators carry out all the steps by hand.

When making Z-splices always observe the splicing instructions for the belt type to be spliced.

1. Measure the correct length of the belt and add 35 mm splicing allowance to the length of the belt.
2. Cut the belt off at a right angle.
3. Fix the clamping table (1) with the tensioning clamp (2) to the edge of a work bench.



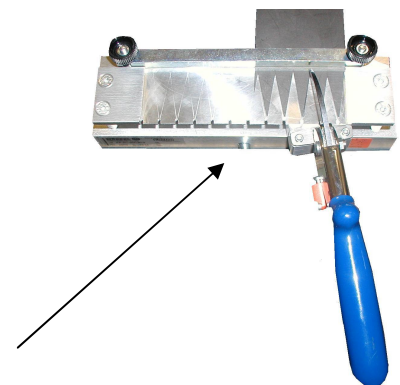
4. Stick one end of the belt to the **left** edge, as far as it will go, on the punching plate with double-sided adhesive tape.
 - ⇒ Make sure that the 90° cut edge reaches right to the notches (3) without covering them.



Note:

Secure the end of the belt from slipping with the clamp.

5. Guide the open shears (5) with the stop boss (6) one after the other into the notches on the punching plate and punch the end of the belt into Z-shapes.
6. Press the shears changing from left to right till they go no further against the punching plate and punch the belt in Z-shapes.
7. Place the second end of the belt (with the same side to the top as for the first end of the belt) to the edge on the very **right** and punch the end of the belt in Z-shapes too.



6 Maintenance work

Before operating the tool, the following maintenance work must be carried out each time to ensure that 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:

- Hand-Z- shears may only be operated in their original undamaged state. Before operation, check that important components are complete and work properly.

6.1 Spare parts

Material number	Designation
7871160	Tensioning clamp
7871279	Blade 1001

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 device according to the respective materials (metal, plastics and so on) and recycle them.