Operating manual

ZSK Automatic Bobbin Winder

230V 50Hz/60/Hz

CE

574 228 / Z-008-1380

02418V10 [GB] - 2016

Subject to change!
Änderungen vorbehalten!

Printed in Germany

[GB] 02418V10

1. ZSK Automatic Bobbin Winder

1.1 Safety, cleaning and disposal

Safety instructions

Wear close-fitting clothes and, if you have long hair, a hair net or suitable headgear when working with the winder. Do not wear jewelry. Wide sleeves, loose hair, rings or chains can get be caught or entangled in moving winder parts. In order to avoid cuts and bruises do not reach in the area of the course of thread.

Cleaning

Always disconnect the power supply before carrying out cleaning work. The winder is at zero current only when the mains plug is pulled out.
Clean the bobbin winder gently with a damp cloth.
Do not use solvents or scouring agents.

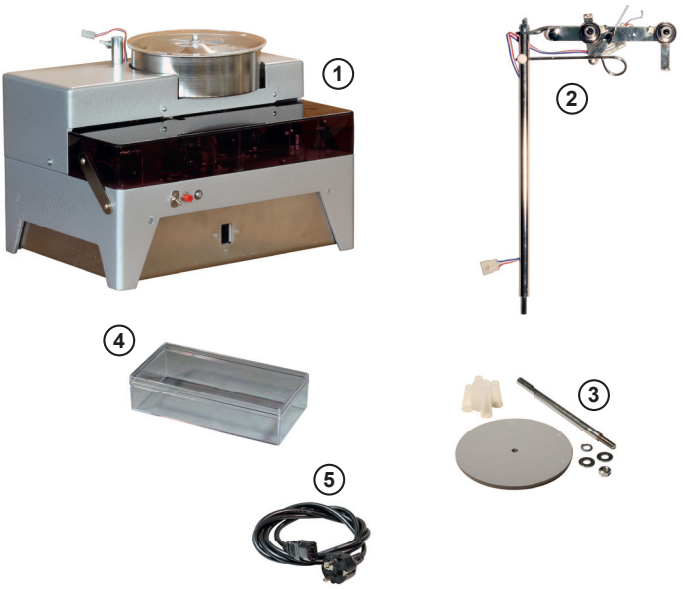
Disposing of packaging materials

Dispose of the materials in compliance with national and local law.
Packaging paper and foil can be reused and should be recycled.

Disposing of equipment

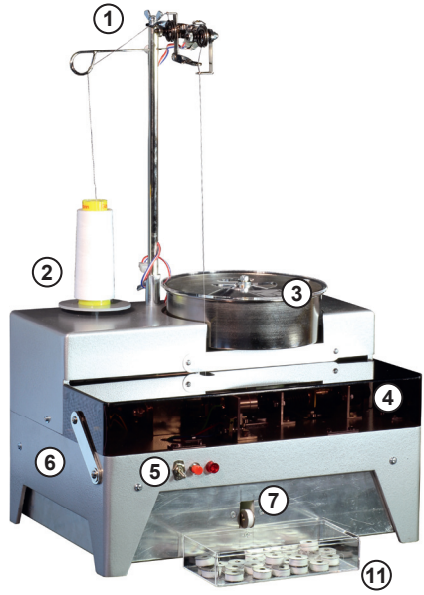
Dispose of the bobbin winder after its product life in compliance with national and local law.

1.2 Scope of delivery



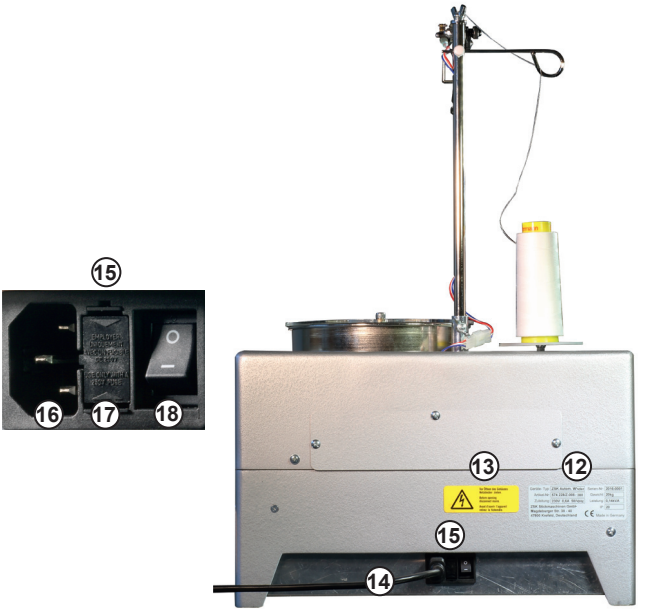
(1) ZSK Automatic bobbin winder
(2) Yarn guide
(3) Yarn cone bracket
(4) Collecting tray
(5) Power cord

1.3 Overview (Front side)



(1) Yarn guide
(2) Yarn cone bracket with yarn cone
(3) Bobbin depot
(4) Cover
(5) Switch panel
(6) Winder cabinet
(7) Bobbin ejection
(8) Start/Stop switch
(9) Push button Jogging
(10) Control lamp
(11) Collecting tray

1.4 Overview (Rear side)



(12) Type label
(13) Safety label
(14) Power cord
(15) Connector-Combined panel
(16) Power connector
(17) Fuse 250 V/1A (2x)
(18) Rocker switch

1.5 General

The ZSK Automatic bobbin winder is suitable to fill automatically empty bobbins with corresponding yarns. It is conceived in a way that both small cones and big cones can be used to fill the bobbins. Bobbins in different sizes can be filled **(Filling only one bobbin size each time - no mixed filling of different sized bobbins!)**

The handling of the bobbin winder is easy and does not call for any special training.

NOTICE

It has to be guaranteed that the automatic bobbin winder is connected to a corresponding power supply (see type label on the rear side).
Before connecting it to the wall socket, the rocker switch (rear side) has to be in position 'O' (OFF).

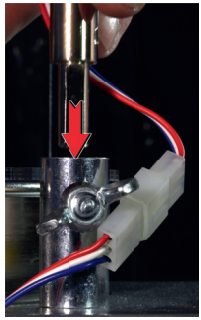
Type label

Geräte- Typ:	ZSK Autom. Winder	Serien-Nr:	2016-0001
Artikel-Nr:	574 228/Z-008-1380	Gewicht:	20kg
Zuleitung:	230V 0,6A 50/60Hz	Leistung:	0,14kVA
ZSK Stickmaschinen GmbH Magdeburger Str. 38 - 40 47800 Krefeld, Deutschland		IP: 20 CE Made in Germany	

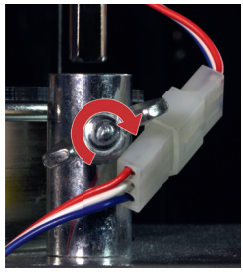
Rocker switch OFF (Rear side)

1.6 Assembly

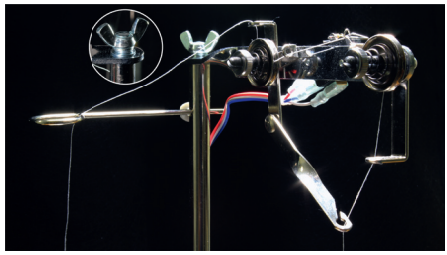
1.6.1 Assembly yarn guide



• Insert the guide bar of the yarn guide with the flat side towards to the rear into the mount on the winder.



• Tighten the wing screw at the mount.

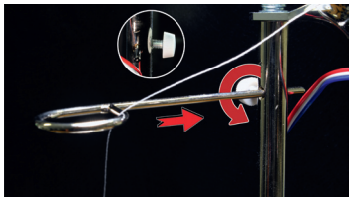


• Release the upper wing screw at the yarn guide.

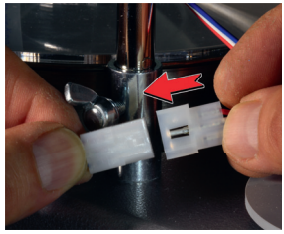
• Adjust the yarn guide straight facing to the winder front. The yarn has to fit vertically into the cut of the cover

• Tighten the upper wing screw.

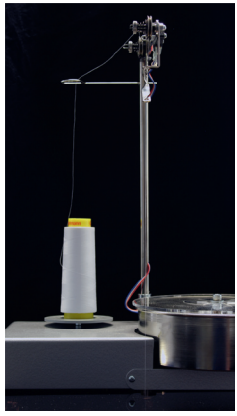
- Release the white knurled screw.



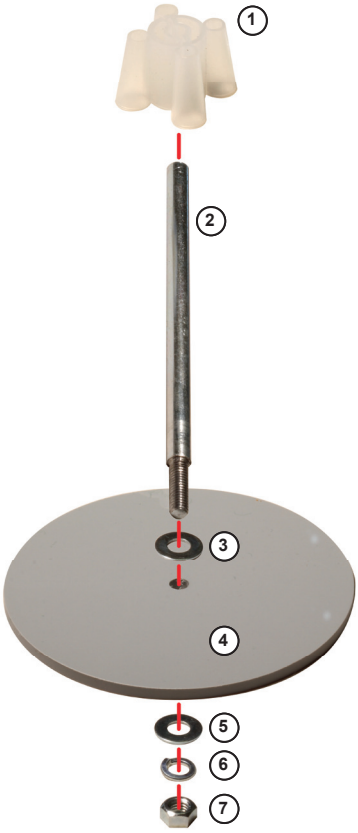
- Rotate the thread bow evincible showing in a horizontal position.
- Slide the wire eye forward into the mounting hole until it is placed central over the yarn cone bracket.
- Tighten the knurled screw.



- Plug the coupling device from the yarn guide to the winder connector.



1.6.2 Assembly yarn cone bracket



- Slide in order the washer (3), the plastic sheave (4), the washer (5), the lock washer (6) over the screw thread of the cone spindle
- Tighten the nut (7) on the screw thread.
- Tighten the mounted cone spindle in the corresponding tap hole in the winder cabinet
- Slide the yarn cone lock (1) from above over the cone spindle (2) till on the plastic sheave (3).

NOTICE

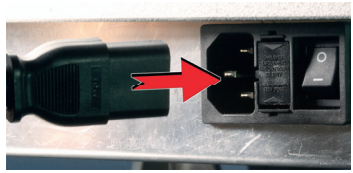
The yarn cone lock (1) will be needed for yarn cones with large cone core only. Small cones can be fixed on the cone spindle (2) without the cone lock.

1.7 Installation

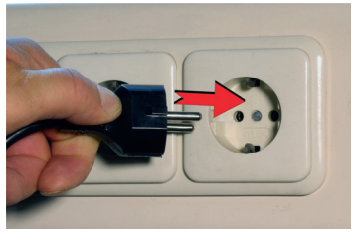
1.7.1 Electric installation

NOTICE

It has to be guaranteed that the automatic winder is connected to a main supply corresponding to the electrical data of the winder (see type label on the rear side). The rocker switch (rear side) has to be adjusted in position 'O' before the main plug is plugged in.



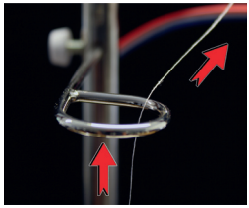
- Plug in the rubber connector of the power cord in the connector socket of the connector-combined panel on the rear side.



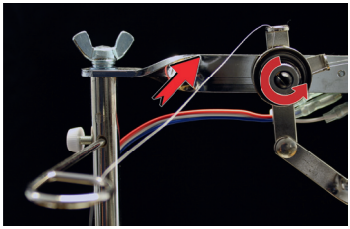
- Plug the power cord into an adequate main supply with the necessary connected loads

1.8 Threading winder

• Pull the bobbin thread vertical up from the yarn cone.



• Operate the thread bottom-up through the thread bow.

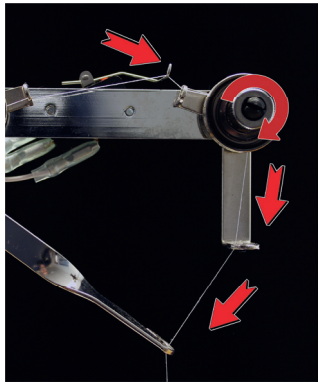


• Operate the thread to the upper thread guide of the rear tension regulator.

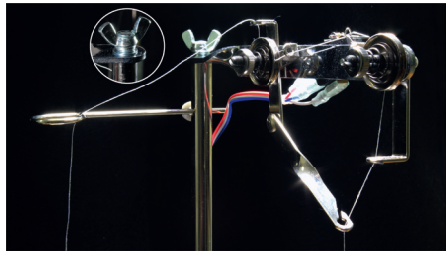
• Run in the thread through the upper thread guide of the tension regulator.

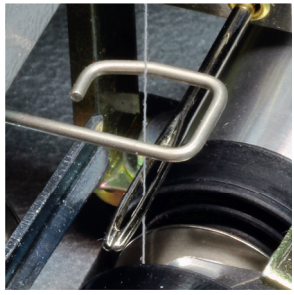
• Pull the thread from the left to the right in between the curved washers.

• Run in the thread through the right thread guide of the tension regulator



- Operate the thread through the wire eye of the switch contact spring.
- Run in the thread through the upper thread guide of the front tension regulator.
- Pull the thread from the right to the left in between the curved washers.
- Run in the thread through the lower thread guide of the front tension regulator.
- Pull the thread through the movable hook loop.





- Open the winder cover.
- Operate the thread top down through the thread bow.
- Run in the tread top down through the needle.
- Pull the thread using forcepts thus far through the needle, until the thread sag some centimeter underneath the needle

1.9 Winding process

1.9.1 Start winding process

• Charge the bobbin depot with empty bobbins.

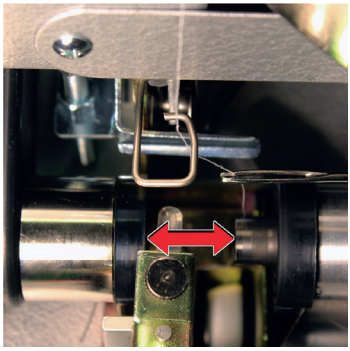
CAUTION

Removing of bobbin depot cover is to be performed only if the plug has been removed from the mains socket. Operation is allowed only when covers are mounted and closed.

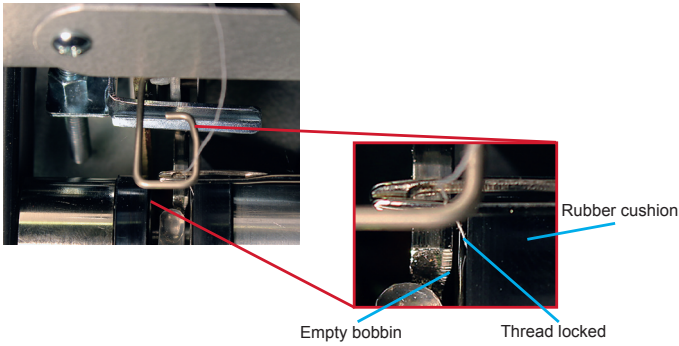
• Switch on the rocker switch on the rear side, position ‚I'.

WARNING

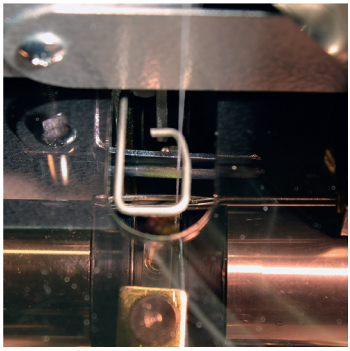
Handle with care operation push button JOGGING. This is a setting mode with winding, cutting and clamp mechanisms which perform movements also when the cover is opened. Ensure when using this mode that no clothes, hair, rings, chains etc. plus extremities are not close to moving parts. There exist the risk of cutting damage and contused wound, as well as burn, abrasion and catching through rotating parts.



- Press repeated the switch ***JOGGING***, until the bobbin support is completely released.
- Control the thread excess lenght underneath the needle. If necessary, pull down the thread through the needle using a forcepts.



- Press repeated the switch ***JOGGING***, until an empty bobbin is located in the bobbin support, the bobbin support is closed and the thread is trapped between bobbin and rubber cushion.
- Control clamping of the thread (see image enlargement).



- Press the switch ***JOGGING***, until the empty bobbin starts filling.
- Close the winder cover.
- Operate the dip-switch on front side in position ***ON***.

NOTICE

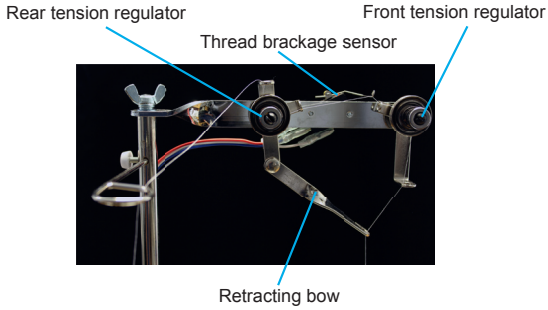
Check once in a while the charging level of the bobbin depot during the automatic winding process. Fill the depot with more empty bobbins if needed.

The automatic winding process begins. The thread will be cut after filling the first bobbin, another bobbin will be loaded and filled.
This process is continued until it will be interrupted.

- Operate the dip-switch on front side in position ***OFF***.

1.10 Adjustments

1.10.1 Adjust thread tension



The thread tension will be adjusted with the knurled ring of the rear and front tension regulator

Clockwise rotation ⇨ Thread tension is increased

Counter clockwise rotation ⇨ Thread tension is decreased

NOTICE

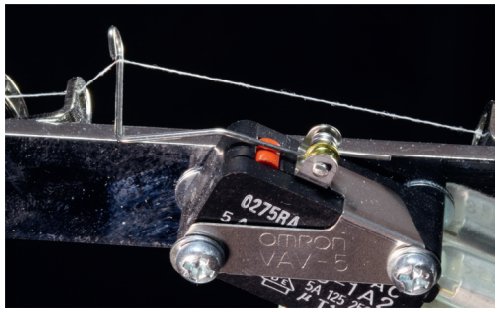
The thread tension has to adjusted with both knurled rings, so that the bobbins will be filled not to tight and that after thread cutting the thread breakage sensor not interrupted the winding process.

The correct thread tension at the bobbin case is shown in the figures below:

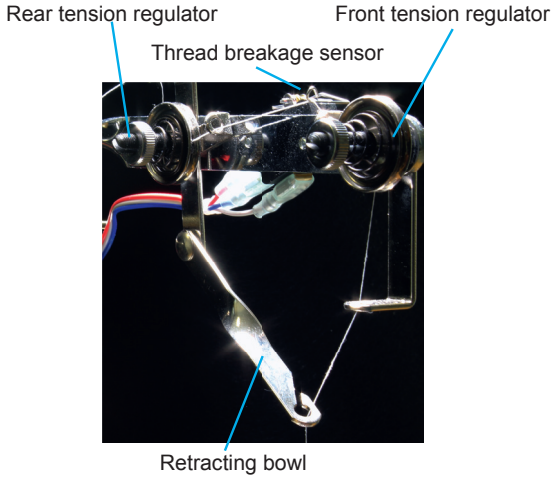
wrong **correct**

1.10.2 Thread breakage sensor

The thread breackage sensor is used for monitoring and interruption the winding process at thread breakage or an empty yarn cone. By reduction of thread tension through occasions outlined above the thread breakage sensor gets loose, moves up and interrupt the winding process.



1.10.3 Retracting bowl

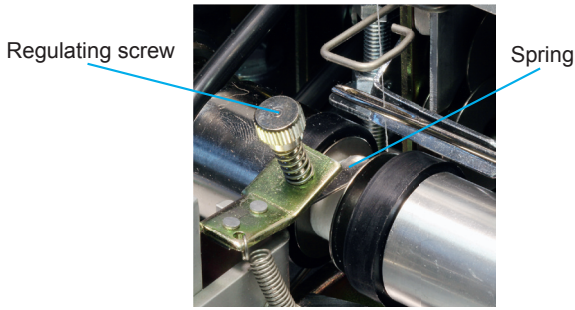


The retracting bow hold the thread during the winding process in a position, which warranted, that the bobbin thread moves preferably vertical from above into the bobbin support.
After thread cutting the bobbin thread is slightly retired at the cutter from the retracting bow, that means, for the next winding process the lenght of sagging bobbin thread will be slighly reduced, so that no overlaying thread (thread beginning) is formed when winding the next bobbin.

1.10.4 Adjust cut-off time

The cut-off time of the bobbin filling is adjustable (e.g. if small bobbins are not filled properly or after backfitting the winder towards bobbins with a greater diameter).

- Pull via ***JOGGING*** automatically a new bobbin into the bobbin support, for which applies the adjustment.
- Start winding process.
- Adjust the new cut-off time through counter clockwise respectively clockwise rotation of the regulating screw. In the process the spring will be lowered or uplifted and the cut-off time will be modified.



Regulating screw clockwise rotation ⇨ cut-off time earlier ⇨ lower charging level

Regulating screw counter clockwise rotation ⇨ cut-off time later ⇨ higher charging level

NOTICE

The cut-off time has been chosen correctly, when the bobbin is reeled up to its brim. Avoid extremely filled or brimmed over bobbins.

1.11 Troubleshooting

Fault	Cause	Remedy
Bobbins have been filled irregularly (one-sided).	Direction of the thread shake down in the bobbin is one-sided.	Check left-right-justification of yarn guide. The position of yarn guide has to be verical over the bobbin support.
Empty bobbins will not be delivered to the bobbin support during the winding process. Buzzer sounds.	1. Bobbins are clamped in the bobbin depot and did not slight into the lower guidance groove. 2. Empty bobbin depot.	1. Put a pin in the borehole of bobbin depot and rotate carefully the cover in one direction. The clamped bobbins have been loosened and the bobbins slide into the lower guidance groove again. 2. Fill in new bobbins.
Buzzer sounds.	1. Thread breakage. 2. Empty yarn cone. 3. Empty bobbin depot. 4. Bobbins locking thread cutter.	1. Threading winder again. 2. Use new yarn cone, threading winder again 3. Fill in new bobbins. 4. Check bobbin ejection skid, if necessary eleminate bobbin jam.
Device don‘t turn on with rocker switch (rear side).	Sicherung(en) defekt.	Change fuse(s).

1.11.1 Change fuses

- Insert a screwdriver into the lower slot of the fuse holder.
- Unlock the lower lock through slightly rotation of screwdriver.

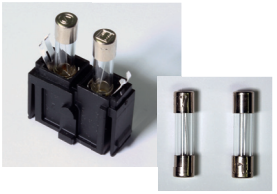
- Insert a screwdriver into the upper slot of the fuse holder.
- Unlock the upper lock through slightly rotation of screwdriver.

NOTICE

At first unlocking the fuse holder can sit taut in the guidance. Be careful when removing the fuse holder.

⇨ The fuse holder jumps a little out of the cover.

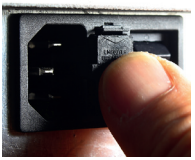
- Remove the fuse holder.



• Change the defective fuse(s).

⇨ Fuse 250V 1A

• Place the fuse holder in the guidance again. Pay attention to the mounting direction.



• Press the fuse holder into the guidance until it locks audible.

⇨ Fuse holder built in and locked

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EC CONFORMITY DECLARATION

Manufacturer:	ZSK Stickmaschinen GmbH Magdeburger Str. 38-40 D-47800 Krefeld
Documentation compiler:	ZSK Stickmaschinen GmbH Magdeburger Str. 38-40 D-47800 Krefeld
Product designation:	ZSK Automatic bobbin winder
Type designations:	574.228 (Z-008-1380)
Serialnumber:	2016-0001 bis 2016-9999

The forenamed bobbin winder complies with the following relevant harmonisation directives of the Community:

- EC Machine Directive 2006/42 EC
- EC Low Voltage Directive 2014/35 EU
- EC Electromagnetic Compatibility Directive 2014/30 EU

Applied standards:

- DIN EN ISO 12100
- DIN EN 60204-1
- DIN EN 61000-6-2
- DIN EN 61000-6-4
- DIN EN 61140

Krefeld 01.08.2016

J. Sobizack, The Management

Signature

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