



# INSTRUCTION MANUAL



# CARDWINDER 340

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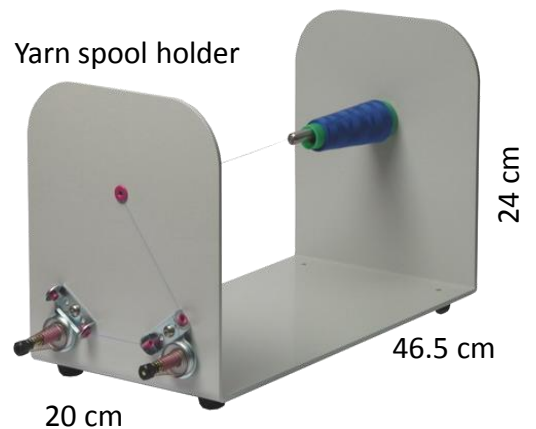
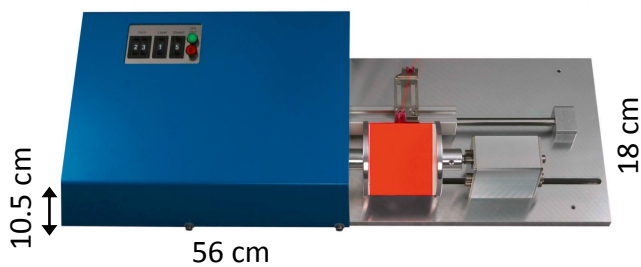
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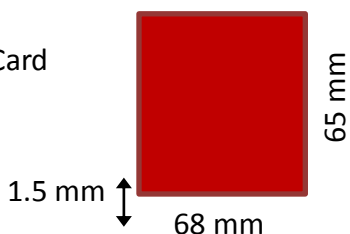
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## Dimensions (approx.)

Cardwinder 340



Sample Card



# 1. Introduction:

## Field of application

The Cardwinder 340 is designed for winding Yarn Sample Cards very precise, rapid and efficient.

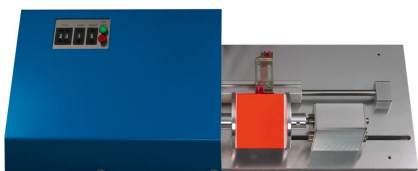
The precisely wound cards can be used for many kinds of testing such as:

- Sampling
- Colorimetric
- Whiteness measuring
- Trials for UV-Light resistance
- After scouring
- Color cards

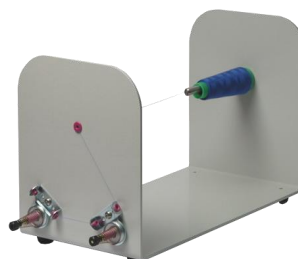
## 2. Setting up the Cardwinder 340:

### Placing the Components

The Cardwinder 340 has a separate Yarn spool holder that takes one yarn spool for unwinding. It is also equipped with two yarn tension devices that give proper tension to the yarn for a regular and precise winding.

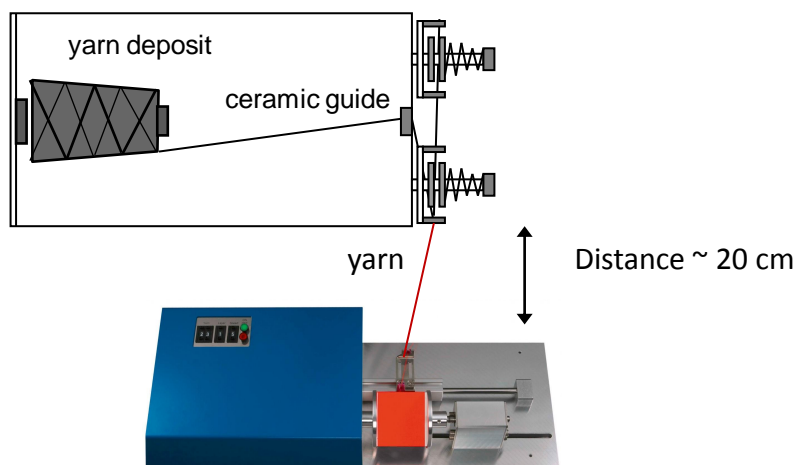


Cardwinder 340



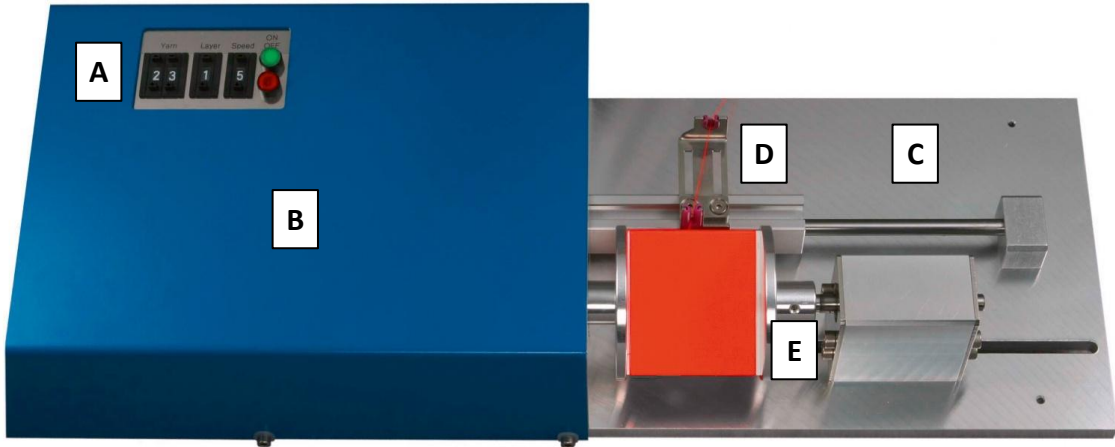
Yarn spool holder

The Yarn spool holder has to be placed behind the Cardwinder 340 as shown in the top-view drawing below. The yarn must be running freely without touching any other parts.

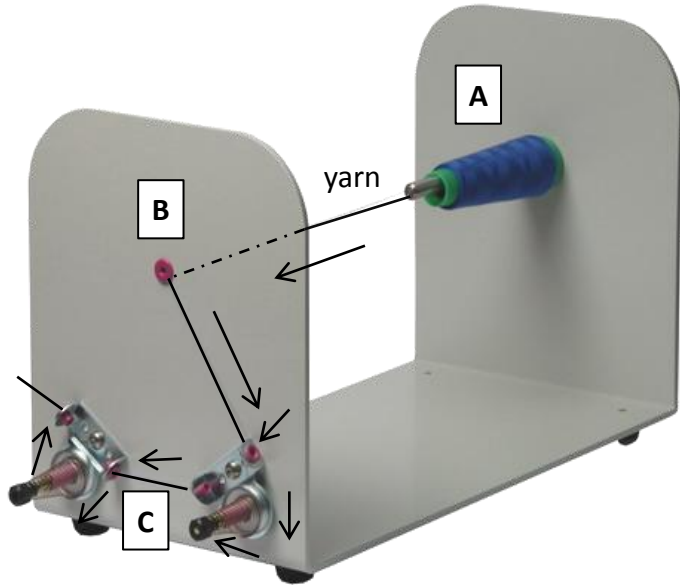


### 3. Explanation of the Cardwinder 340 Components

The Cardwinder 340 consists of the following components:



- A Control Input Panel
- B Cover / Drive Motor inside
- C Base plate
- D Thread Guide
- E Card Holder

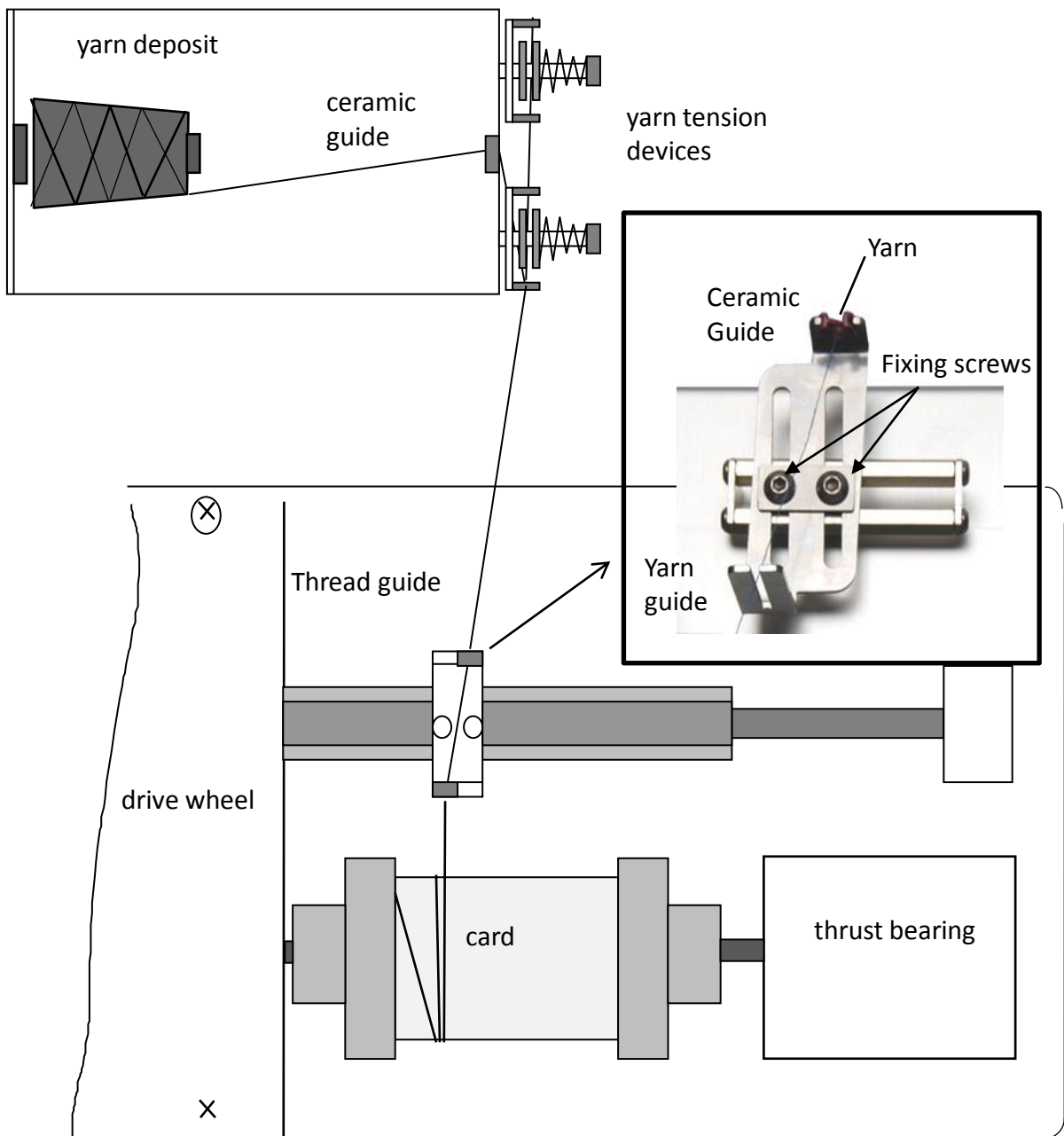


- A Yarn spool
- B Ceramic eyelet
- C Tension devices

The tension devices have to be adjusted according to the yarn count and to the card material.

- A too low yarn tension makes an irregular and uneven winding surface on the card.
- A too high yarn tension can cause the card to be bent after winding.

## 4. Threading:

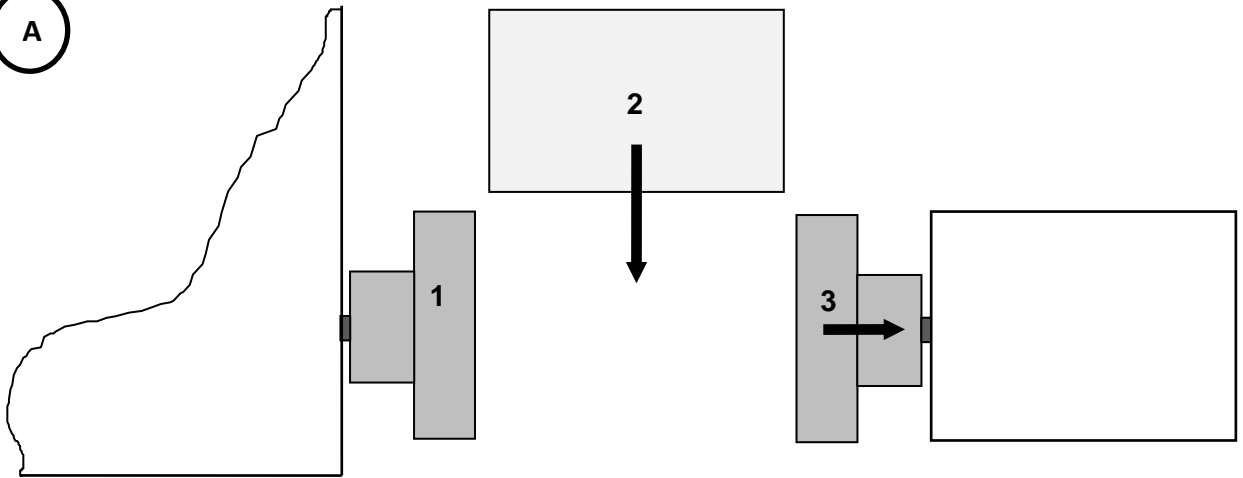


1. Move the thrust bearing into the right position (depends on the card length used).
2. Thread the yarn through the eyelet of the yarn tension device, thus leading between the ceramic disks.
3. Put the yarn into the thread guide and fix it by squeezing it between the card and the drive wheel.
4. Start winding with GREEN button (ON).

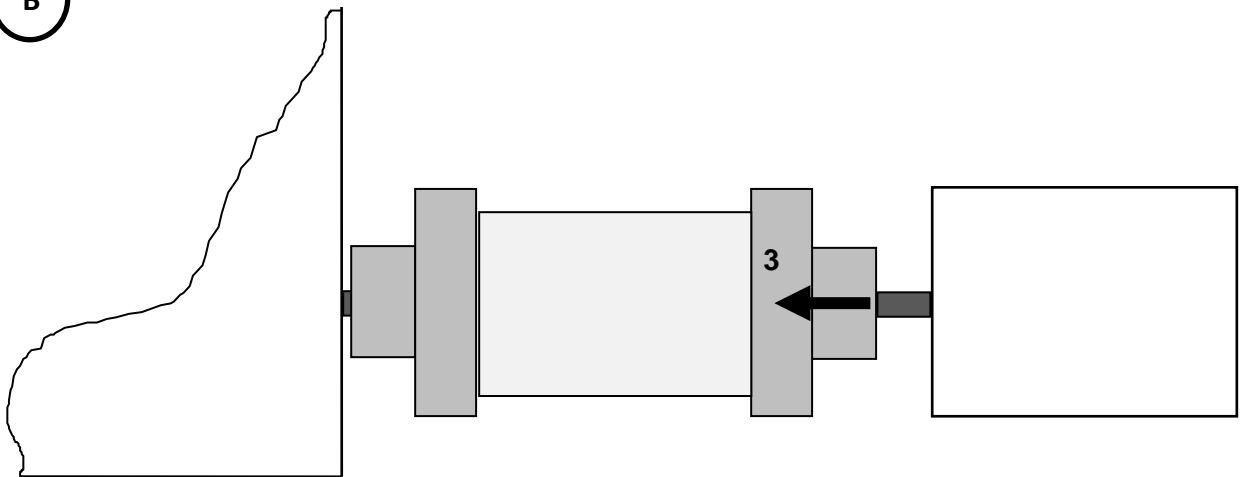
**Remark:** Winding can be interrupted at any time by pressing the RED push button (OFF) once.

## 5. Gripping of the card:

A



B



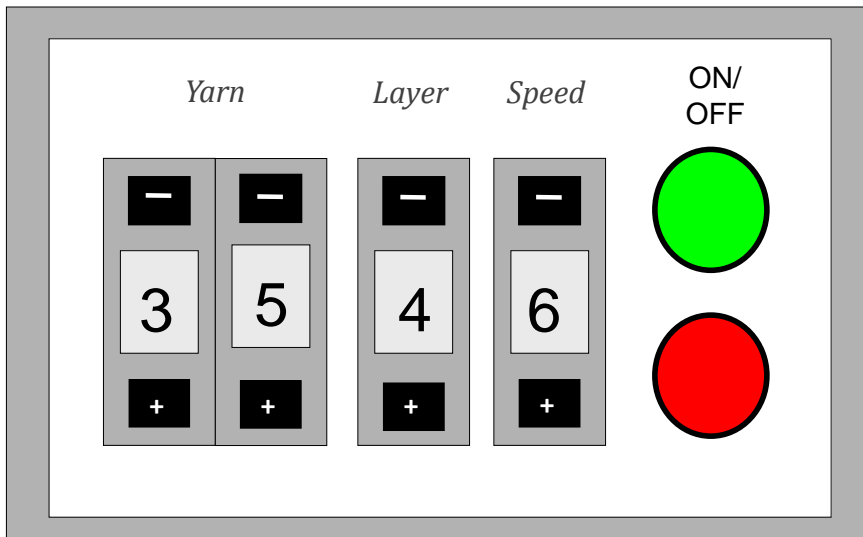
**A** Push back the running wheel (3) and put in the card (2) in the guiding groove of the driving wheel (1)

**B** Place the guiding groove of the running wheel upon the card (3)

Take out the card in reverse direction

**Attention:** Before winding, take care that the card is completely and straight fixed in the two guiding grooves (see figure B) .

## 6. Adjustment of the winding parameters



<p><b>ON</b> (green button)</p>	<p>By pressing this green button, the winding is started, the button lights up green while winding. When the winding has finished, the device stops automatically and the green lamp is off.</p>
<p><b>OFF</b> (red button)</p>	<p>By pressing this red button, the winding is interrupted immediately. By pressing while the device is not winding, the traversing slide goes to the opposite located end position. A red lamp lights up when the motor of the spindle is overloaded, for example when the tension of the thread is too high.</p>
<p><b>Yarn</b> traversing</p>	<p>Selector key to adjust the traversing per revolution. (0.01 – 0.99 mm/r) With this key the traversing can be regulated according to the yarn diameter exactly so that a very compact and regular winding can be achieved.</p>
<p><b>Layer</b> number of layers</p>	<p>Selector key to adjust the number of the layers (1 – 9 layers). Adjustment 0: touch control by pressing the green button.</p>
<p><b>Speed</b> Winding speed</p>	<p>Selector key for regulation of the spindle speed 300 – 2700 revolutions / min. in steps of 300 rev. / min.</p>

## 7. Regulation of the yarn tension device:

By turning the adjusting wheel of the yarn tension device, the yarn tension may be regulated during winding.

The regulation depends on the yarn count and the kind of surface.

The yarn tension device has to be adjusted resulting in an evenly wound yarn card.

If the yarn tension is regulated too slightly, maybe the yarn can be stripped from the ready-wound sample card, or the winding is too weak and inexact. In this case the yarn tension has to be regulated stronger.

If, however, the yarn tension is regulated too strong, the edges of the card are stressed too much and become bent, in the worse case they are even buckled (above all when using thin cardboard). Then the yarn tension has to be regulated more slightly.

**Remark:** The optimal regulation of the yarn tension can only be made by trials.

## 8. Electrical data

Parameter	Value	Unit
Current supply voltage	220 – 240	VAC
Current supply voltage	110 – 120 (*)	VAC
Power consumption (max.)	100	W
Winding speed	300 – 2700	rev. / min.
Traversing of thread	0.01 – 0.99	mm / rev.
Thread traversing accuracy (max)	2	%
Number of layers	1 – 9	layers

(\*) for use at 110 – 120 VAC an external main power adapter has to be used.



## 9. Technical data

Parameter		Value	Unit
Cardwinder 340 (Art.-No. T5-0106)	Total height	105	mm
	Total depth	180	mm
	Total breadth	560	mm
	Total weight	9.9	kg
	Winding speed	300 - 2700	rpm
	Traversing of thread	0.01 – 0.99	mm / rev.
	Number of layers	1 - 9	layers
	Thread traversing accuracy (max)	2	%
	Card size	65 x 68 x 1.5	mm
	Operating Temperature (n.c.)**	5 - 45	°C
	Storage Temperature (n.c.)**	0 - 55	°C
Yarn Spool Holder (Art.-No. T5-0116)	Total height	240	mm
	Total depth	465	mm
	Total breadth	200	mm
	Total weight	5.6	kg

\*\* n.c. = non – condensing

## 10. Safety Regulations

The following safety notes are general regulations that have to be cared while setting up and operation the Cardwinder 340 and its Components.

Otherwise, there is a high risk of damaging the device and of personal injury.



### CAUTION:

- **The Cardwinder 340 is designed to be used in a laboratory or production environment. Do not use the Cardwinder 340 in a humid environment like dyehouses etc.**
- **Do not wind wet or extremely humid yarns**
- **Do not operate the Cardwinder 340 with wet hands**
- **Do not touch the Card Holders or the Card while the Cardwinder 340 is winding**
- **Before connecting the Power Supply, check if the Mains Power Supply Voltage is within the range of 100 – 240V AC / 50-60Hz**
- **Before connecting the Power Supply, check if the Mains Power Supply is equipped with a proper Mains Fuse**
- **Check the Mains Supply Cable frequently for damage**
- **Do not crimp the Mains Supply Cable and the Cable between the Cardwinder 340 and the Power Supply**
- **Do not cut the Mains Supply Cable and the Cable between the Cardwinder 340 and the Power Supply**
- **In excessive use, the Drive Motor of the Cardwinder 340 may heat up to 70°C. Do not touch the drive motor in order to avoid personal injury due to high temperatures**
- **Do not set up and use the Cardwinder 340 close to flammable objects**
- **Do not set up and use the Cardwinder 340 close to hot devices**
- **Do not use the Cardwinder 340 for other applications than card winding**