



# CF-5



# Mini-Microcentrifuge Operating Manual

witeg Labortechnik GmbH



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#### 1 Introduction

Thank you for purchasing our **CF-5 Centrifuge**. You did a good choice buying a **Wisd** product.

Before use, please read this manual and use it properly.

To cover the user's health and avoid the product's destruction you have to follow the safety instructions of the second chapter.

Please keep this operating manual in a save place for future reference and hand it out if you consign the device to a third person.

**Witeg** reserves to modify the capsule or make amendments for the improvement of quality and efficiency without prior notice.

## 2 Safety Instructions

#### 2.1 Description of symbols



#### **WARNING**

Information for avoiding injuries or fatal accidents.



#### **ATTENTION**

Safety instruction to avoid a damage of the product.



#### **ATTENTION**

Information about technical parameters.



#### **WARNING** of explosions

Safety instruction to avoid explosions.

#### 2.2 Instructions

For a safety and faultless using of the device it is indispensable that you read the following instructions purposely and follow them by the use.



- Connect the device only to the suitable power supply. Please have a look to the identification plate.
- Use the device only in electric circuits with ground fault circuit interrupter.
- Check the power supply cord before you stick it into the electrical outlet.
- Do not use power bars to extend the power supply cord.
- Only use extension cables with sufficient cable cross section.
- > Do not touch the device with wet hands during the usage because this might cause an electrical shock.
- ➤ If unexpected sound, smell or smog is generated by the device, pull out the main plug and contact the manufacturer or your supplier immediately.





- Disconnect the power supply plug before cleaning or maintenance.
- > If you use radiation or contaminated samples the responsibility is only up to you.



- > Use this device only if you read the whole safety instructions.
- This device should only used by persons who are familiarized with safety instructions made for laboratories.
- > Pay attention that no liquid reach the controller or inward of the capsule.
- You have to keep the device clean if you want to get a longer life of it.
- Wear corresponding protective work clothing during the usage.
- All circuits and electrotechnical components are **witeg** owned technology. In fact of this it is necessary that only **witeg** authorized personal repair the device.
- > Pull out the power cable if you didn't want to use the device for a longer time.



Reparations and amendments should only made by witeg authorized people. Contraventions exclude the warranty.



> Do not use this device in areas with potentially explosive atmosphere.

## 3 Package content

quantum	denomination
1	CF-5 Table Top Centrifuge
1	power supply curt
1	operating manual
1	Circular Fixed Angle Rotor
1	Strip Rotor
6	Adaptor for 0.2 ml and 0.5ml PCR tube
1	L-Wrench(1.5 X 55mm)

# **4 Product description**

#### 4.1 Key features

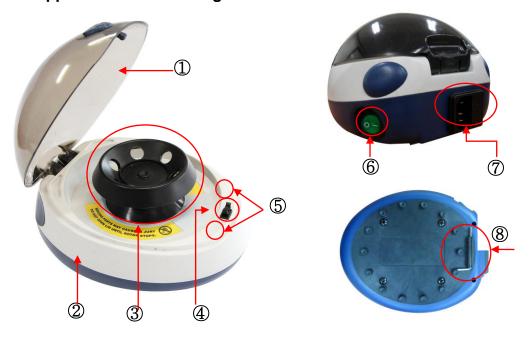
**CF-5 Centrifuge** offers High maximum rpm(Max. 5,500rpm) and very low noise and low vibration in operation.

- Compact Size design.
- Ergonomic Design for easy operation.
- > Air Cooling System : Prevent heat from motor into the inside.
- Push Door Lock System for user convenience.
- Lid-Activated On/Off Safety Switch System.
- Quiet and low vibration.
- CE Certification





#### 4.2 Appearance and Naming



No	Description	No	Description
1	Lid	(5)	Blue Led
2	Body	6	Main Power Switch
3	Circular Fixed Angle Rotor	7	Power Socket
4	Main Door Lock Switch	8	L-Wrench(1.5 x 55mm)

## 5 Positioning the device and commissioning

- 1. Remove the package carefully.
- 2. If there are any unexpected transport damages, please inform your forwarder and your costumer service.
- 3. Remove perhaps soiling and package material and other items in the centrifugal chamber.
- 4. Before you connect the device with the electrical outlet, please let some time laps until the device is acclimatised.
- 5. Make sure that you follow all safety instructions.
- 6. Push the Lid Clamp and open the lid. You can find the circular fixed angle rotor, CFAR1512 (12 x 1.5/2.0 ml tubes) equipped in the centrifuging room. Please check carefully if there is anything wrong including loose fixing of the rotor or leaning of the rotor. In case there is any kind of damage found, please inform the forwarder and your contractor.
- 7. Connect the device with the power outlet.
- 8. Switch the device on and start the process (look at job description).





# **6 Operation**





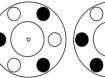
#### 6.1 Use (Circular Fixed Angle Rotor and Strip Rotor)

- 1. Push the Lid slightly, then it will be open.
- 2. Insert the tubes in circular Fixed Angle Rotor(Strip Rotor).
- 3. Push the Lid slightly, then it will be closed and the Centrifuge will be running.
- 4. When the Centrifuge is running, Blue Led will be lighting.
- 5. Push the Lid slightly, then the Centrifuge will be stop.
- 6. When the Centrifuge is stopping, Blue Led will be lights out

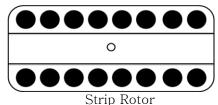
#### 6.2 Tube Balance of Circular Fixed Angle Rotor and Strip Rotor







6 Tubes



- 1. Tubes should be used balanced in the same way as the figure.
- 2. 2.Use of the product in a stage of imbalance causes an accident and products damages.

#### 6.3 Replace Rotor (Circular Fixed Angle Rotor ⇔ Strip Rotor)









- 1. Firstly check the L-Wrench from bottom of unit.(If lost, use proper tool).
- 2. See the hole between Rotor and Body, and then insert L-Wrench into the hole. Turn it counterclockwise. It will be loosen.
- 3. Draw the Circular Fixed Angle Rotor.
- 4. Put the Strip Rotor on the motor axis and then insert L-Wrench to the hole turn it clockwise.
- 5. If you are to replace the Strip Rotor to Circular Fixed Angle Rotor, follow the same protocol.

## 7 Maintenance and cleaning

- Please read the whole safety instructions before you start to maintain or clean the device.
- > Pull the power plug out of the electrical outlet.
- > Only use care cleaning agents and soft cleaning rags.
- Organic lotions, strong chemicals and rough cleaning rags can damage the device.
- If you not want to use the device for a long time, pull of the power plug and keep it dry in the package.
- Only use original spare parts and accessories.

#### 8 Technical data

Model		Mini-Microcentrifuge Set, "CF-5"	
RPM 8	& Max. RCF	Max. 5,500 rpm, 1,775 x g	
Max. Capacity		6 x 0.5-/1.5-/2.0-ml tubes, 2 x 0.2ml PCR 8-tube Strip or 16 x 0.2ml PCR 8 Tubes	
Rotor	Angle Rotor	6 Holes Circular Fixed-Angle Rotor for 0.5-/1.5-/2.0-ml Tubes	
	Strip Rotor	16 Holes Strip Rotor for 0.2ml PCR 8-tube Strip or individual Tubes	
Α	dapter	Included 6 x 0.2-/ 0.5-ml Tube Adapter	
IV	laterial	Lid-PC, Body-ABS, Rotor-ABS	
Dimensi	on (w x d x h)	178 x 150 x h109 mm	
Packing Size & Gross Weight		200 x 180 x h175 mm, 2 kg	
Power Consumption		8 W	
Power plug type		Hybrid E+F	
Power Supply*		AC 230V, 1N~, 50/60Hz	





#### 9 Certificate

# **Certificate**



The quality and all features were checked by the manufacturer before the shipment.

We grant from date of purchase

two years guaranty.

This certificate excludes damages by natural disasters or incorrect usages by the costumer.

Please look on your account and complete following table:

Article	CF-5 Mini-Microcentrifuge	
Serialno.		
Date		

#### witeg Labortechnik GmbH

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