









Coffee Grinder



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## 1.OVERVIEW

# Models

### Available in two versions:

- 1. MS Copper and Brass
- 2. MSC Chrome

Copper and brass finish (model MS)



Chrome finish (model MSC)

**Specifications** 

| Weight        | 8 kg  |
|---------------|-------|
| Height        | 38 cm |
| Depth         | 26 cm |
| Base Diameter | 18 cm |

# **Features**

- 1. Glass hopper
- 2. Precisely machined grinding discs
- 3. Long lasting construction

## All models come with:

- 1. Tamper
- 2. Instruction manual and guarantee card.

Tamper



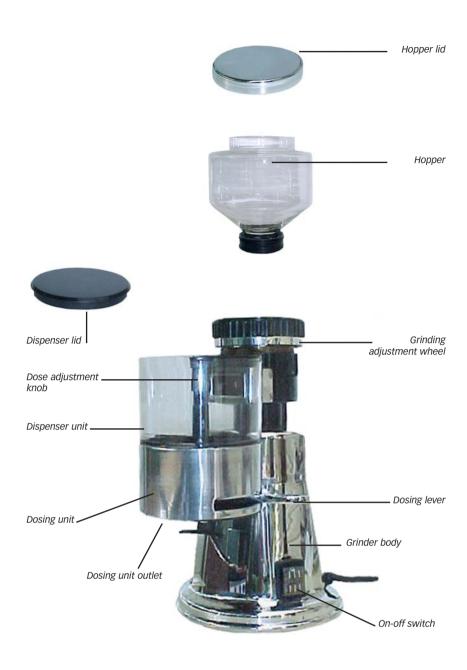
Instruction manual with guarantee card







### 2.GRINDER PARTS



### 3.ASSEMBLY

- 1. Place glass hopper onto adjustment wheel.
- 2. Place hopper lid onto hopper.
- 3. Place dispensing lid onto dispensing unit.





### **4.MAKING ADJUSTMENTS**

# **Testing the grind texture**

When the grinder is being used for the first time, you'll generally need to adjust the grind texture and the quantity (dose) of coffee grounds dispensed into the coffee handle when the dosing lever is operated.

- 1. Remove lid from hopper and fill hopper with coffee beans.
- 2. Turn on the grinder at its on-off switch and grind about 50 grams of coffee.

  Switch machine off at its on /off switch.
- 3. Test coffee for correct flow. The texture of the coffee grind is tested by making a short black or espresso coffee (30ml) using the single cup basket in the coffee single cup basket in the coffee handle. Fill the basket with enough grounds to suit (usually two operations of the dosing lever), and firmly tamp the grounds. Fill the basket with enough grounds to suit (usually two operations of the dosing lever), and firmly tamp the grounds.



After tamping, the coffee grounds should be around 4-5mm from the top of the filter basket.

Place handle in the espresso coffee machine and observe the coffee flow when the machine is operating. The best coffee extraction is achieved when 30ml of coffee takes between 25–35 seconds to flow. Repeat this test on at least two coffees to ensure the flow is correct. Note that this time is a guide only, as the pump pressure is different between espresso machines. The photos below show the differences in the coffee flow caused by different grind textures.

- If the extraction time takes less than 25 seconds, the grind is too coarse and will need to be made finer.
- If the extraction time takes more than 35 seconds, the grind is too fine and will need to be made coarser.



Flow too fast grounds too coarse



Flow correct grounds correct



Flow too slow grounds too fine



### **4.MAKING ADJUSTMENTS**

# Adjusting the grind texture

- 1. Hold down the locking pin and turn the grinding adjustment wheel **one notch** at a time:
- clockwise to make the coffee grounds finer
- anti-clockwise to make the coffee grounds coarser
- 2. Release the adjustment wheel locking pin which will click and lock back into its new position.

The grinding adjustment wheel will move freely while the locking pin is held down. It's important to move the grinding adjustment wheel **only one notch at a time,** then to release the locking pin. A small change in the grind texture can make a big change to the flow of coffee.



Test the grind after each adjustment by making an espresso coffee. Before making a change to the grind texture, be sure to empty all previously ground coffee from the dosing chamber. See page 10 for details of the grind adjusting wheel and operation of the grinder.

# Testing the coffee dose

Coffee dose refers to how much coffee comes out of the grinder with each pull of the dosing lever. The size of the dose depends on the type of espresso machine (see next page).

The dose is determined by first dispensing the required number of doses into a single cup filter basket. After tamping, the level of grounds in the basket should be around 4–5mm from the rim of the filter basket. (This also applies to the double cup filter basket.) If the basket is too full, it will be difficult to fit the coffee handle to the espresso machine. If the level is too low, the coffee will lack taste and could flow too quickly. Once set for a particular espresso machine, the dose will not usually need to be readjusted.

It's important when adjusting the dosing quantity to roll the coffee. This is done by placing the dispenser lid under the dosing unit outlet and operating the dosing lever so coffee grounds fall onto the lid. Do this about five times then return the ground coffee on the lid back into the dispensing unit.

Repeat this process once more to ensure all six dosing chambers have been evenly filled.



Operating the dosing lever.

Place thumb on the front of the dispensing unit (to steady the grinder) and pull the dosing lever fully forwards to its end, release it and allow it to spring back to its resting position.

### **4.MAKING ADJUSTMENTS**

# Adjusting the dose

Before changing the dose, make sure all chambers in the dosing wheel are full and that the coffee has been rolled as described on the previous page. See page 9 for details of the dispensing unit.

- 1. Turn the dose adjustment knob one click to change the dose:
- To **reduce** the dose, turn the knob **clockwise**.
- To *increase* the dose, turn the knob *anti-clockwise*.

While making this adjustment, place a finger or thumb into the dispensing unit outlet so the wheel is prevented from turning.

2. After making an adjustment, test the dose by grinding more coffee and rolling it to ensure all dosing chambers are full. Fill a single cup basket and tamp the grounds, then check if the right quantity of coffee has been dispensed. Make further adjustments as required.



Adjusting the dose of coffee dispensed with each pull of the dosing lever

# **Number of doses**

The following assumes the dose has been adjusted for the particular Elektra domestic espresso machine being used with the grinder.



Nivola (W only)



Micro Casa Semiautomatica



Mini Verticale Semiautomatica (all models)

The above machines need two pulls of the dosing lever to fill a single basket and three pulls of the dosing lever for a double basket. The coffee level should be 4–5mm from the rim of the coffee basket after the grounds have been tamped.

The machine on the right needs one pull of the dosing lever to fill a single basket and two pulls of the dosing lever for a double basket. The coffee level should be 4-5 mm from the rim of the coffee basket after the grounds have been tamped.



Micro Casa a Leva (all models)







### **5.OPERATING INSTRUCTIONS**

These instructions assume the grind texture and the dose have been adjusted correctly. If not, see previous page.

- 1. Remove lid from hopper and fill hopper with coffee
- 2. Turn on the grinder at its on-off switch and grind enough coffee to fill all chambers in the dosing unit. Don't fill the dispensing unit beyond about two thirds of its capacity.
- 3. Switch grinder off at its on-off switch.

4. Roll coffee. Rolling coffee is achieved by placing the dispensing unit lid under the dosing unit outlet and operating the dosing lever to dispense coffee grounds onto the lid. Pull the dosing lever fully forwards to its end, release it and allow it to spring back

to its resting position. Do this about five times, then return the ground coffee on the lid back into the dispensing unit.

Repeat this process one more time to ensure all six dosing chambers have been evenly filled with rolled coffee and that there is no air trapped in the chambers.



- 5. Fit a single or double cup filter basket to the coffee handle and hold the handle so the filter basket is under the dosing unit outlet. Operate the dosing lever to dispense coffee grounds. See previous page for a guide on the number of doses needed for each type of Elektra domestic espresso machine.
- 6. Tamp the grounds. Tamping compresses the coffe grounds to give a uniform flow of water through the grounds, ensuring complete extraction of coffee. After tamping, gently twist the tamper to feather the grounds to the side of the filter basket to give a clean edge. This helps ensure an even flow of water through the grounds.





Tamping the grounds is essential for best coffee extraction



• When adjusting the grind it's important to make only one change at a time. Making the grind finer by more than two notches can cause coffee to become caught

between the blades and jam

the mechanism.

- If the grind is adjusted too finely it can cause the blades to grind together and shear off the metal. This can be easily identified by a high pitched metallic sound coming from the machine. Turn off the grinder immediately.
- Ground coffee from the dispensing unit should never be placed back into the coffee bean hopper, regardless of how coarse it may appear.
- Never hit the coffee handle on the dispensing unit as it could damage the unit by causing it to chip or crack.
- Never place wet or used coffee grounds into the dispensing unit.

### 7. MAINTENANCE AND CLEANING

- 1. Remove and wash the hopper, hopper lid and dispenser lid monthly. **Don't wash these** parts in a dishwasher.
- 2. Regularly remove old coffee grounds from inside the dispenser by operating the dosing lever at least six times (to empty all six chambers). Use a clean dry cloth or paint brush to remove grounds that are stuck to the surfaces. Don't use any water.
- 3. Remove the hopper and use a paint brush or soft dry cloth
- to clean out old coffee grounds from the housing containing the grinding discs. Don't use any water.
- 4. Clean the surface of the machine with a clean, wet soft paper towel or soft cloth and polish with a clean, dry soft paper towel or soft cloth.
  - the Never immerse machine in water.



Do not use any alcohol, solvents or abrasive creams or cloths on the surface of the machine.

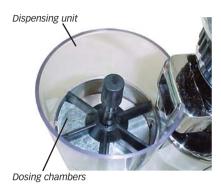




### **8.OPERATING PRINCIPLES**

# **Dispensing unit**

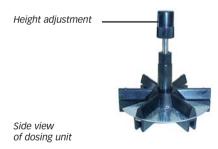
During grinding, the coffee grounds enter the dispensing unit. At the bottom of this unit are six dosing chambers, arranged as a wheel that is rotated one chamber at a time when the dosing lever is operated.





Details of the dispensing unit

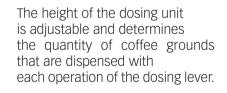
The dosing unit sits in the bottom of the dispensing unit and is rotated clockwise by the wheel connected to the dosing lever. The photos below show the dosing unit removed from the dispensing unit.

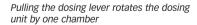




Top view of dosing unit

When the dosing lever is operated, the dosing wheel rotates over an outlet that allows the contents of a dosing chamber to be dispensed into the coffee handle filter basket. This is shown below, in which the dosing unit has been removed from the dispenser.









### **8.OPERATING PRINCIPLES**

# **Grinding discs**

The grinder has two precisely machined grinding discs that produce a uniform grind.

The discs are arranged with the cutting blades facing each other, in which the distance between the discs determines the texture of the grounds. The closer the discs, the finer the grounds.





The grinding discs in an Elektra domestic coffee grinder

The discs are mounted one above the other, a lot closer than shown here

One disc is attached to an electric motor that rotates the disc. The other disc does not rotate and is attached to an adjusting wheel that allows the distance between the grinding discs to be altered.

Locking pin notches. These are located on the underside of the grinding adjustment wheel.



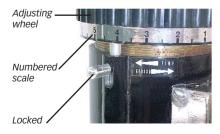
Fixed disc, which is attached to the grinder adjusting wheel

Rotating disc which is attached to the motor

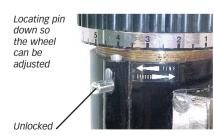
Because the grind texture adjustment is critical, the adjusting wheel has locating notches, with a spring-loaded locating pin positioned so it clicks into a notch. A scale around the adjusting wheel gives an indication of the position of the wheel. Rotating the wheel changes the distance between the grinding discs.

To rotate the wheel, hold the locating pin down and move the wheel one notch position at a time. Rotating the wheel clockwise gives a finer grind (because the discs are moved closer together).

The grinder must be off when changing the position of grind adjustment wheel.







The grind adjustment wheel is held in position by a locating pin. Hold the pin





