



SOIL GRINDER SG 1

The Soil grinder SG 1 is designed to grind dry soil samples without comminuting plant inclusions and stones. Soil comminution in the grinder occurs as a result of material particles being crushed by rollers. The grain size of the comminuted product is regulated by the size of the discharge grating openings and depends on the physical properties of the material.

ADVANTAGES

- Grinding of soil components in a sample without overmilling;
- Adjustment of product grain size due to:
 - replaceable discharge grates;
 - adjustment of gap between rollers and grate.
- Discharge grate with conic openings;
- Easy cleaning due to:
 - folding discharge funnel;
 - easily removable support with attached discharge grate;
- Two discharge modes:
 - to the receiving container (volume 2 L);
 - to the custom containers mounted in the box adapter;
- 90° rotation and locking of chamber for maintenance and adjustment of roller position;
- Sealing of the charging funnel reduces dust during operation;
- A nozzle for connecting the dust removal system;
- Reduction of vibrations transmitted to the floor due to shock absorbers;
- Possibility to equip with the Control panel;
- Possibility to equip with the Stand with collecting bin.



Soil grinder **SG 1**
on Stand with collecting bin
and Control panel
(recommended set)

CHARACTERISTICS

Loading door dimensions (mm)	37x145
Maximum initial material grain size (mm)	20
Size of discharge grate openings (mm)*	1 and 2
Average comminuted product particle size with grate with 1 mm opening (mm)	100%<1,0
Maximum output (samples/hour)	40
Gear motor power (kW)	0,75
50 Hz supply voltage (V)	380
Overall dimensions without / with Stand and Control panel (Length x Width x Height)(mm)	640x465x720 / 690x645x1315
Weight without / with Stand and Control panel (kg)	60 / 140
Roller material – tool steel	AISI 1066, AISI 01, DIN 150Cr14

*Grates with other opening dimensions can be manufactured to order.

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OPERATING PRINCIPLE

A soil sample is fed through the charging funnel to the comminution chamber, where it enters the space between the rollers and the discharge grate.

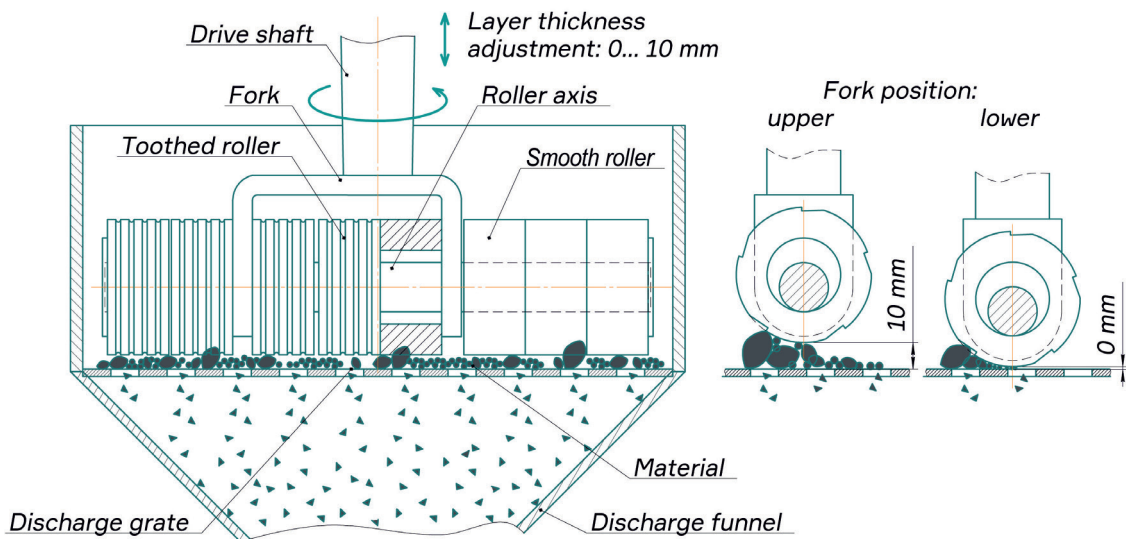
When the gear motor is started, the forks and roller axle begin to rotate, and the rollers (both smooth and toothed) roll over the soil layer, gradually comminuting the sample.

Soil particles are comminuted to 1 or 2 mm (depending on the grate installed) and pass through the opening in the grate to the receiving container.

Solid inclusions (plants, stones) are not comminuted and remain on the grate without fouling the comminuted sample.

APPLICATIONS

Peat, red soil, black soil.



Soil grinder **SG 1** operating scheme



Discharge grate, smooth and toothed rollers



Plastic receiving container and box adapter for custom containers



Drive shaft, fork and rollers on axis