

## DIK-2610

### Dust shielded Automated mill and screen for soil RK4 II



#### 1. Versatile

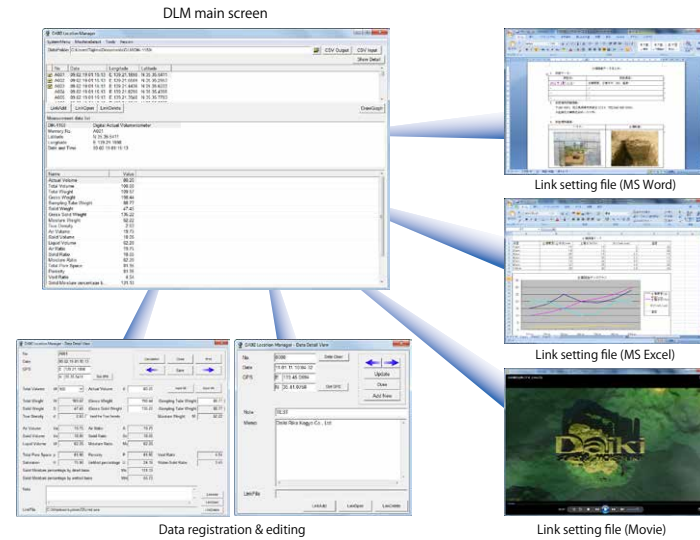
In addition to the "Automatic Soil Crushing & Sieving Machine with Dust Control Function", this software can be used for downloading data on our products or for analyzing data.

#### 2. Collective management of data using the data linking function

The "data linking function" is used to link the collection point data with the various data items related to this point created by multiple other files. The Daiki Download Software can manage all accumulated data stored on the PC.

#### 3. Useful

"Daiki Download Software", it is possible to associate the various files with respect to the measurement data, as "link file".



### Specifications and configuration

Specifications

Item	Description
External dimensions	750 (W) x 670 (D) x 700 (H) mm (excluding protrusions and casters)
Weight	Approx. 160 kg
Crushing method	Planetary gear rotation
Crushing time setting	30 to 120 seconds
Speed adjustment	10 to 80 rpm
Rotation speed	100 to 800 rpm
Current consumption	2.5 A max.
Power source	100 V AC
Sample container material	Polypropylene
Sample container capacity	Container for the raw sample to be loaded: approx. 900 ml Container for the processed sample to be received: approx. 600 ml
Recommended soil volume to be loaded	Approx. 100 to 200 g per container

Product configuration

Model	Product Name	Qty.
DIK-2610	Dust shielded Automated mill and screen for soil RK4 II	1 set
	[ Breakdown ]	
DIK-2600-10	Dust shielded Automated mill and screen for soil	1
DIK-2600-11	Sample container	8
DIK-2600-12	Crushing rod (metal core + core case)	8
	[ Part ]	
DIK-2600-51	Dust-sealing container	1
DIK-2600-52	Container for loading sample (inner container)	1
DIK-2600-53	Sieve ring (with holes of 2-mm dia.)	1
DIK-2600-54	Receiving container	1
DIK-2600-55	Cap for the receiving container	1
DIK-2600-58	Metal core (molybdenum)	1
DIK-2600-59	Core case for the crushing rod (with a cap)	1 set

\* For dioxin analysis, stainless steel containers are available by custom order. (Please contact our sales department for details.)

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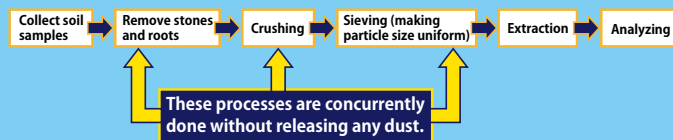
### AGENCY

- Ideal for soil crushing/sieving in environmental analysis
- Much shorter time for sample pretreatment
- Parallel, rapid processing of crushing and sieving of various samples
- Non-dust function for handling radioactive-contaminated soil
- Soil crushing and 2-mm sieving can be performed concurrently with only one machine

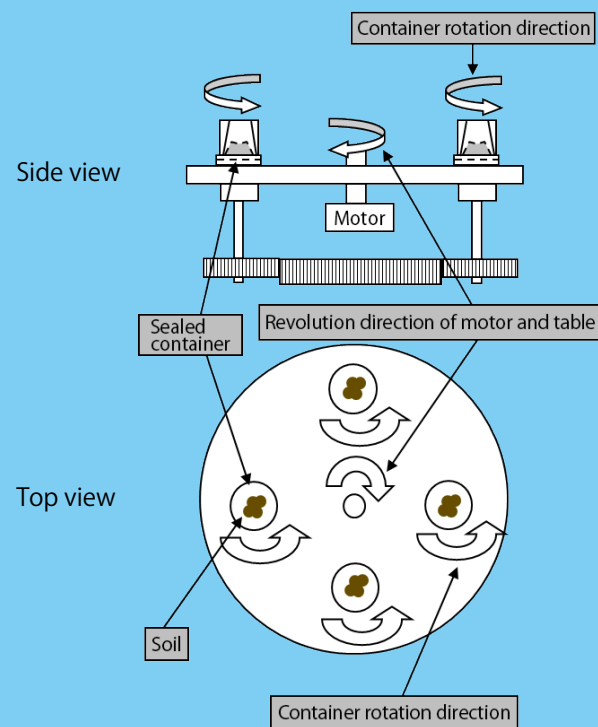
## Main features



- Crushing and the sieving of the soil of  $\phi$  2mm or less can be done at the same time.
- All the processes can be done without putting out dust at all. Therefore, there is no worry of the health hazard by inhaling dust.
- There is no soil dust go out from equipment, so the dust collector is unnecessary.
- Since this equipment is compact design, it is possible to set up them in the most of laboratory.
- Because all the process are done in the airtight container, the cleaning time will be greatly reduced. It is used to taking long time to clean up soil dust more than the crushing and the sieving of the soil samples.
- Working hours can be shortened, and it correspond to a large amount of sample processing by improving the working efficiency of crushing and the riddle division process.

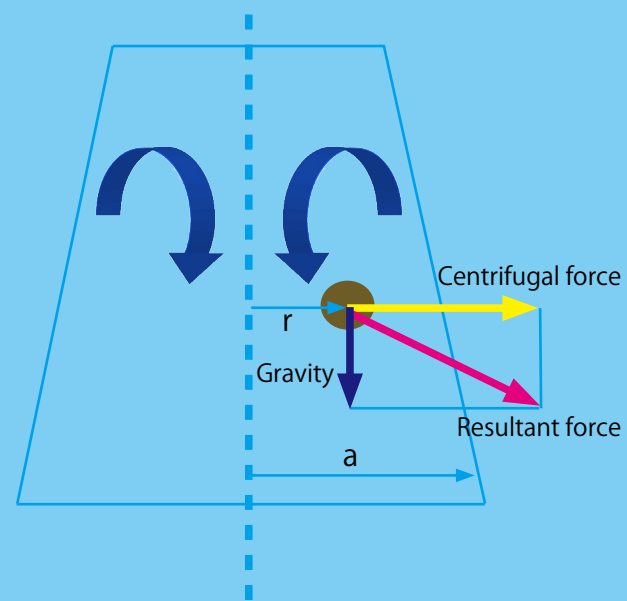


## Crushing and sieving mechanism



Crushing time is shortened by the planetary gear rotation device using a combination of rotation and revolution, as well as the crushing rod.

To achieve the best mechanism design based on hydrodynamic theory



Movement of soil particles in the rotating container

## Crushing procedure

1. Soil before crushing (example)
 

Air-dried loamy soil (particle size of approx. 10 mm)
2. Loading the soil
 

Load 100 to 200 g of soil to be crushed into the sample container.  
To maintain the crushing efficiency, be careful not to overload the container.
3. Installing the sample container
 

Install the sample container on the main machine.  
The process of crushing and sieving takes 90 to 120 seconds.
4. Completing crushing and sieving
 

The soil is crushed, sieved to 2 mm or less and then collected into the receiving container.
5. Soil after crushing (example)
 

The loamy soil after 90-second crushing and 2-mm sieving (particle size  $\leq$  2 mm).  
Repeat the crushing process as necessary.

## Sample containers (8 sets per unit)



### Sample container list

- ① DIK-2600-51 Dust-sealing container
- ② DIK-2600-52 Container for loading sample (inner container)
- ③ DIK-2600-53 Sieve ring (holes of 2-mm dia.)
- ④ DIK-2600-54 Receiving container
- ⑤ DIK-2600-55 Cap for the receiving container



### Assembled sample containers

The sample containers (polypropylene) are designed to be assembled.

Thanks to the dual lid design, the dust generated during crushing and sieving is sealed inside the container and prevented from coming out of the unit.



### The receiving container with its cap fitted

The receiving container, which is originally designed to be used for collecting crushed/sieved soil, can be used as a storage container when a lid is fitted.

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## Crushing rod (8 rods per unit)



To increase crushing efficiency, the core of the crushing rod is made of molybdenum metal for its high specific gravity. It is also covered with a polypropylene case for preventing crushing stones.



- ① DIK-2600-12 Crushing rod (metal core + core case)
- ② DIK-2600-58 Metal core (molybdenum)
- ③ DIK-2600-59 Core case for the crushing rod (with a cap)