

The FEL3 Rainfall Simulator can be used in the laboratory or in the field for a wide range of research from studies of infiltration under sprinkler irrigation to estimating soil loss in high intensity tropical storms.

Erodibility of soils can be studied in the laboratory and the influence of crop cover on the effect of rainfall can also be investigated.

It is ideal for investigating the relationship between rainfall and soil erosion, the nature of soil erosion potential on different soil types and identifying methods by which erosion may be prevented.

THE SIMULATOR INCORPORATES: APERTURE ADJUSTMENT
FIELD AND LAB TEST PLOTS
TILTING STAND
RAIN GAUGES



Experimental content

- ▶ Investigate the relationship between rainfall intensity and soil erosion
- ▶ Investigate the nature of soil erosion potential on different soil types
- ▶ Investigate the methods by which soil erosion may be prevented
- ▶ Determine the kinetic energy of simulated rainfall at various rainfall intensities
- ▶ Obtain a relationship between splash erosion and intensity of simulated rainfall

Description

The Rainfall Simulator consists of a metal frame that supports the spray head assembly. The unit may be placed directly on the ground for field studies or used with its accessory tray for laboratory experiments. In use, water is pumped from the holding tank via a control valve to the spray nozzle.

Water from the spray nozzle is interrupted by a horizontal rotating disc driven by a variable speed motor. Adjustable width apertures in the disc enable some water to pass and the remainder is recirculated via the tank. For use in field or laboratory, electrical and water supplies are required.

Requirements

Scale



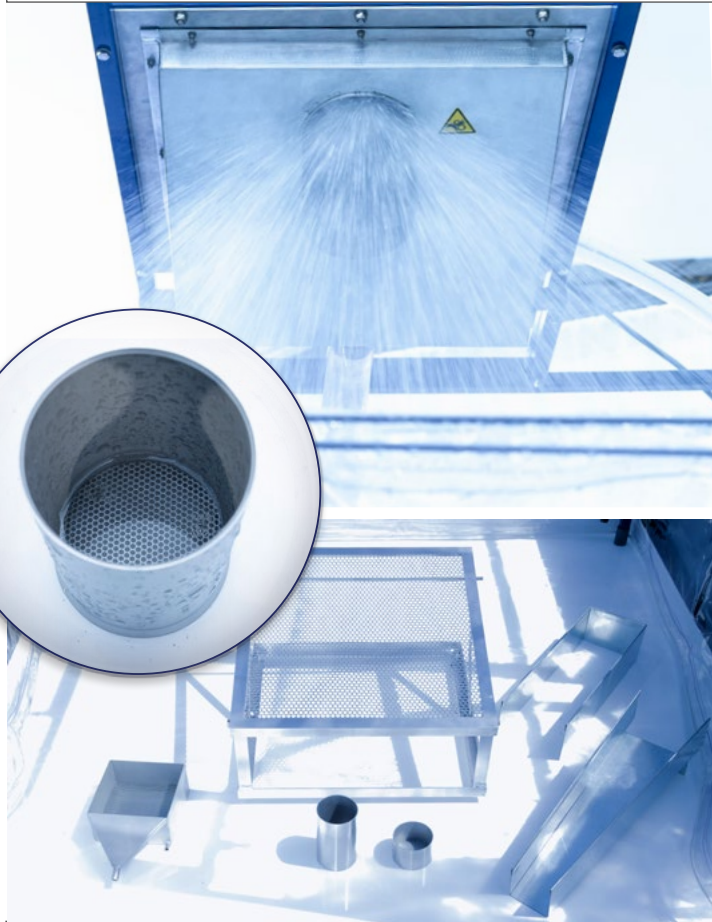
► Electrical supply:

FEL3-A: 220-240V/1Ph/50Hz

FEL3-B: 120V/1Ph/60Hz

FEL3-G: 220-240V/1Ph/60Hz

► Cold water supply



Overall dimensions

Length	2.65m
Width	1.60m
Height	2.70m

Packed and crated shipping specifications

Volume	3.9m ³
Gross weight	576Kg

Ordering specification

Rainfall Simulator comprising:

- Spray head assembly supported by metal stand
- Storage tank from which water is pumped to spray head via flow meter and control valve
- Small square test plots
- Field test plots
- Tilting stand for test plots
- Sample vessels
- Rain gauges
- Complete with instruction manual



Ordering codes

- FEL3-A: 220-240V/1Ph/50Hz
- FEL3-B: 120V/1Ph/60Hz
- FEL3-G: 220-240V/1Ph/60Hz

Knowledge base

- > 28 years expertise in research & development technology
- > 50 years providing engaging engineering teaching equipment

Benefit from our experience, just call or email to discuss your laboratory needs, latest project or application.

An ISO 9001:2015 Company



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Aftercare

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