



WHEN PARTICLE SIZE MATTERS

# WET SIEVING

## Operating Instructions





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Manual can be subject to technical modification and errors.

## Instructions Notes

These instructions for the wet sieving operations for Endecotts sieve shakers give all necessary information in the sections mentioned in the Contents.

They give instructions to the target group(s) defined in the respective sections for safe, correct handling of the wet sieving attachment for Endecotts sieve shakers. It is important that each target group(s) is familiar with the relevant section, in order to ensure safe, reliable handling of the kit according to its intended use.

This technical documentation is for use as a reference work and as a learning aid. The individual sections are complete in themselves.

No repair instructions are included in these operating instructions. If repairs are necessary please contact your supplier or Endecotts Ltd directly.

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### Warnings

The following signs are used to warn of hazards:



**Personal injuries**



**Material damage**

## Repairs

These operating instructions do not contain any repair instructions.

In the event of a requirement of repairs please contact Endecotts Ltd or an authorised representative (service technician).

**In this case, please notify the following:**

The local Endecotts representative
Your supplier
Endecotts Ltd direct

**Your address for service:**

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# Safety

## Target group:

All persons concerned with the machine in any way.

The entire Endecotts machine range is a modern, highly efficient product, comparable with the latest technology standards. If the machine is used according to the intended purpose with knowledge of this technical documentation it is completely safe and reliable to operate.

## Safety instructions

As the operating authority it is your duty to ensure that all persons charged with working on the Endecotts sieve shaker:

- Have read and understood all the instructions on safety,
- Before beginning work know all the instructions and regulations for the target group relevant to their work,
- Have access to the technical documentation for this machine at all times, without problems.
- New personnel should be familiarised with safe, proper handling of the machine before beginning work on the Endecotts sieve shaker, either by verbal instruction from a competent person or through this technical documentation.
- Improper operation can cause injury to persons or damage to the equipment. You are responsible for your own safety and that of your employees.
- Ensure that no unauthorised persons have access to the Endecotts sieve shaker.

For your own protection have your employees confirm that they have been instructed in operation of the Endecotts sieve shaker. The draft of a suitable form is given at the end of the section on safety.



We exclude claims for damages in any form for damage to persons or property caused through non-observance of the following safety instructions.

## Safety Notice

### Wet sieving with Endecotts sieve shakers

All sieve shakers are electrically operated and it is therefore important to ensure that the liquid used in wet sieving operations **NEVER** come into contact with the shaker mechanism or input terminals.

This Wet Sieving attachment is supplied for use with **Endecotts** Sieve Shakers and should only be used by qualified personnel.

It is recommended that the mains power supply is via a residual current device on a miniature circuit breaker (Power Breaker).

If there is a doubt with respect to the use of equipment, contact a qualified electrician **IMMEDIATELY!**

**Extreme care should be taken to avoid contact with the shaker,  
or any electrical part of supply in operation at any time.**

In the event that water spills into the shaker **DO NOT TOUCH THE SHAKER.**

With dry hands switch off the supply at the mains and disconnect the mains supply. The shaker should be allowed to dry out thoroughly and examined by qualified personnel before further use.

**"THE SHAKER MUST BE CONNECTED TO A MAINS EARTH"**

Should wet sieving be a routine procedure then consideration should be given to the possible use of a remote controlled system.

# Wet Sieving

## Description

When sieving certain types of media, such as slurries, it has been found more efficient to utilise the Wet Sieving Method. In order to use this method it is necessary to obtain a Wet Sieving Attachment which is suitable for the sieve shaker and diameter of sieves intended to be used.

## The Wet Sieving Kit consists of the following items:

- 1 off Wet Sieving Instructions.
- 1 off Clamping Instructions.
- 1 off Special Wet Sieving Clamp Plate.
- 1 set 'O' Ring Seals. One required for each sieve in the stack.
- 1 off Special Wet Sieving Receiver.  
(see available sizes below )

## Part Numbers:

ZMWSK-OCT200	ø 200 mm	for Octagon 200, Octagon 200 CL
ZMWSK-OCT200/8	ø 8"	for Octagon 200, Octagon 200 CL
ZMWSK-EFL300	ø 300 mm	for EFL 300
ZMWSK-EFL300/12	ø 12"	for EFL 300
ZMWSK-EFL300/200	ø 200 mm	for EFL 300
ZMWSK-EFL300/8	ø 8"	for EFL 300
ZMWSK-T450	ø 450 mm	for Titan 450
ZMWSK-450/18	ø 18"	for Titan 450

# Operating Instructions

## Method of Use

1. The nylon hose tail must be fitted. Connect a flexible hose to this hose tail and feed to suitable drainage point. The hose tail must have a suitable length of hose fitted to drain into a convenient drainage point.
2. The Wet Sieving Receiver is positioned centrally on the location plate. The outlet tube is connected by means of a flexible hose, to a convenient drain or solvent recovery container.
3. The required sieves are stacked on the Wet Sieving Receiver, using one Sieve 'O' Ring Seal between each sieve and between the lower sieve and the receiver, so that when the sieves are stacked onto each other they form a seal.
4. The Wet Sieving Clamp Plate is positioned centrally on top of the upper-most sieve and securely clamped.
5. Reversed the spray nozzle on top of the Wet Sieving Clamp Plate. Connect to a water or solvent supply, via a suitable hose by means of a flexible hose clip. The pressure must be 3KP/cm<sup>2</sup> (42 PSI) approx. with a flow rate of 1.5 litres/min. The flow rate may need regulating if liquids appear to fill the sieves completely.
6. With the liquid supply turned on, sieving is carried out using the Sieve Shaker in a similar manner to dry sieving.

## Note

With dry hands, switch off the supply at the mains.

Turn of liquid supply before attempting to remove sieves from the sieve shaker.

Since no material will be retained in the Wet Sieving Receiver, the lower sieve must be of such aperture size to retain the smallest desired particles of the sample.

## Liquid Supply

Liquid supply requirements, for efficient spraying:-

Pressure – approximately 3KP / cm<sup>2</sup> (42 PSI)

Flow Rate – 1.5 litres / minute per nozzle.

If solvents are used these must be restricted to types that will not attack the acrylic dome in the clamp plate.

Avoid excessive spillage of liquids on the sieve shaker and wipe dry any spillage as soon as possible.



Never operate your **sieve shaker** directly in water.  
**Danger through current surge.**



During wet sieving always operate your **sieve shaker** connected to a mains socket protected by an FI protective (safety) switch.



The water quantity added should always be run in such a way that the sieve surface is only just covered with water.



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